City of St. Petersburg
Committee of the Whole Agenda
October 24, 2019 at 1:30 PM
Sunshine Center Auditorium

Members: Chair Charlie Gerdes, Vice Chair Ed Montanari, Councilmembers Brandi Gabbard, Darden Rice, Steve Kornell, Gina Driscoll, Lisa Wheeler-Bowman and Amy Foster

Support Staff: Kayleigh Sagonowsky, City Council Legislative Aide

A. Call to Order and Roll Call
B. Approval of Agenda
C. Approval of September 26, 2019 Minutes
D. New Business
    a. City of St. Petersburg Attainable/Workforce Housing and Nexus Study
        i. Robert Gray, Strategic Planning Group, Inc.
    b. Coastal High Hazard Area Proposed Changes
        i. Liz Abernethy, Director of Planning and Development Services
E. Review Referral List
F. Adjourn

Next Meeting:

- October 31, 2019 at 9:00 AM
    - Planning and Development Services Updates, Liz Abernethy
        - St. Pete 2050 Plan
        - Residential LDRs
        - Storefront Conservation Corridor Plan

Attachments:

- September 26, 2019 COW Minutes
- COW Referral List
- New Business Item Support Material

St. Petersburg City Council
Committee of the Whole Report
Meeting Minutes from September 26, 2019

Present: Chair Charlie Gerdes, Vice Chair Ed Montanari, Councilmembers Darden Rice, Amy Foster, Gina Driscoll, Steve Kornell Lisa Wheeler-Bowman and Brandi Gabbard

Also Present: Deputy Mayor Kanika Tomlin, Tom Greene, Rob Gerdes, James Corbett, Claude Tankersley, John Palenchar, Jeannine Williams, Derrill Mcateer, Brad Tennant, and Michael Dema

Support Staff: Kayleigh Sagonowsky, City Council Legislative Aide

New Business:

Private Laterals Ordinance - Derrill Mcateer, Assistant City Attorney

Chair Gerdes framed the conversation by reminding Councilmembers that in order to stay in compliance with the FDEP Consent Order, they will need to enact legislation that addresses private lateral repairs by the June 30, 2020 deadline.

Assistant City Attorney Derrill McAteer provided an overview of the proposed ordinance, explaining it will be added to the building regulations section of the City Code. McAteer said he conferred with the County and the Water Resources Department in order to ensure as much compatibility as possible with the staff level rough drafts of the County's proposed ordinance. The proposed ordinance would classify the pipe that travels from buildings to city-owned wastewater infrastructure as private property. Owner responsibility would stop at the right-of way. Therefore, any work that may need to be performed on these laterals will be paid for by the property owner. McAteer said the terms "building" and "dwelling" are used throughout the ordinance to capture businesses and mobile homes in addition to single and multi-family homes. The ordinance will require that all private laterals be in "good working order" or be repaired, rehabilitated, or replaced. Flexibility was provided in order to allow property owners cost options to bring their property into compliance based on the condition of their lateral. If the lateral only needs repair or rehabilitation, remediation is a viable option. However, if the lateral has completely failed, replacement must occur.

Water Resources Director John Palenchar explained the City will not be proactively inspecting private laterals. Code Compliance will not enforce this ordinance unless there is obvious disregard for pipe conditions like bugs, rats, or sewage on the property. However, if work is being performed on city pipes and they see evidence of a broken private lateral they will alert the homeowner. Once a property owner is aware there is an issue, they need to have an inspection completed by a plumber. The plumber or homeowner will give a copy of the inspection report to the City and will have 180 days to repair, rehabilitate, or replace the pipe from that time.

Councilmembers expressed concerns about educating the public on this ordinance. Some felt it would be more appropriate to educate residents and ask for feedback before it the ordinance is created. Others felt it best to have the ordinance in place with a delayed effective date to ensure deadline compliance and accurate outreach. Councilmember Rice asked how the ordinance will affect the real estate market and wondered if

private laterals are required to be replaced when a property is demolished and rebuilt. Staff said they would review current building codes and report back.

Councilmember Driscoll asked for an update on the Private Lateral Pilot Project in Maximo Moorings and there was discussion about the increased susceptibility for private lateral damages on homes with orangeburg pipes.

Councilmembers Kornell and Montanari expressed concerns that plumbing companies may try to take advantage of homeowners, saying this ordinance requires more repairs than necessary or being dishonest about the current conditions of their pipes. Mr. Palenchar stated that Water Resources will have an active role in verifying that a deficiency exists and they're currently working on compiling a list of reputable companies that can complete the work in order to address these concerns. Deputy Mayor Kanika Tomlin reminded Councilmembers that passing an ordinance about how to deal with faulty private laterals is mandatory. She said the administration could have taken any number of approaches to complete the requirement, but believes they took a middle ground, passive approach.

Action: Councilmember Rice moved approval and the motion passed unanimously. First reading will take place on November 7th, 2019.

Tenants' Bill of Rights - Brad Tennant, Assistant City Attorney

Assistant City Attorney Brad Tennant began the discussion by presenting an amended Tenants' Rights Ordinance to the Council. He explained that based on the feedback from constituents at the last meeting, Councilmember Foster asked to remove all language pertaining to property sales and source of income. Therefore, the remaining components of the ordinance would establish a section for tenants' rights issues in the City Code and establish notification requirements for when a late fee is incurred.

Councilmember Foster informed councilmembers that she intends to meet with staff from local housing authorities and property management companies to work on bringing back the source of income component at another time. She said in the interim, she'd like to see the remaining, non-controversial components passed. She also offered additional information from the Homeless Leadership Board's Late Fee Task Force and sample leases from area apartment associations that would comply with the ordinance.

Councilmember Wheeler-Bowman thanked Councilmember Foster for bringing the issue forward and said the tenants of St. Petersburg need bold action. Councilmember Gabbard referenced a previous committee meeting in which the right to counsel was discussed in conjunction with late fees. She asked for updates on Councilmember Foster's work on these other initiatives and stressed her doubt that City staff were ready to enforce the ordinance five business days after its adoption. Neighborhood Affairs Administrator Rob Gerdes stated that administration has been in conversation with Councilmember Foster and is generally supportive, but agrees that a grace period would be beneficial for informing landlords of the new procedures.

In referencing stakeholder engagement, Councilmember Driscoll expressed concerns with the amount of outreach that has occurred thus far. Councilmember Foster explained that each of the stakeholders she spoke with was already in compliance with the proposed ordinance.

Councilmember Rice asked Councilmember Foster to elaborate on the other elements she'd like to see added to the Tenants' Bill of Rights. She responded that her two other related items would be discussed at the October 24th HLUT meeting.

Councilmembers asked for legal clarification about when, where, and how the conversation would be resumed at a future City Council meeting. Chief Assistant City Attorney Jeannine Williams reported that if the

amended ordinance passed, it would go to the full council where the public hearing would be resumed. Because it would be a continuation, stakeholders would not be given a second opportunity to speak at that meeting.

Action: Councilmember Foster moved to resume the Public Hearing on November 7, 2019, with an amended ordinance increasing the effective date to 90 days after adoption. Councilmember Wheeler-Bowman seconded the motion which passed 5-3 with Councilmembers Gabbard, Kornell, Montanari voting no.

Committee of the Whole Referrals

October 24, 2019

Item	Topic	Return Date and Time	Referral or Prior Dates	Referred By	Staff	Notes
1	Nexus Study	10/24/19 at 1:30 PM	1/24/19 BFT	All Council	Gerdes	
2	Coastal High Hazard Area	10/24/19 at 1:30 PM	1/24/19 COW	Staff	Abernethy Britton	
3	Vision 2050	10/31/19 at 9:00 AM	6/7/18 Referral 5/9/19 PSI	Foster	Abernethy	
4	Residential LDR Updates	10/31/19 at 9:00 AM	Annual	Annual	Abernethy Bryla	
5	Storefront Conservation Corridor Plan	10/31/19 at 9:00 AM	6/13/19 CC	All Council	Abernethy Kilborn	
6	2020 Calendar Setting	12/12/19 at 1:30 PM	Annual	Annual	Sheppard	Selection of 2020 Chair and Vice Chair
7	FY21 Budget Priorities	1/23/20 at 10:00 AM	Annual	Annual	Makosfke	
8	Facilities Maintenance Plan	TBD	5/9/19 PSI	Foster	Glover- Henderson Wendler	At PSI, staff indicated they'd be ready to return in December 2019/January 2020

Dates held for possible COWs:

- 11/18/19 at 3 PM
- 1/30/2020 at 2 PM

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Committee of the Whole
October 24, 2019

TO: The Honorable Chair Charles W. Gerdes and City Council Members

FROM: Robert Gerdes, Neighborhood Affairs Administrator

DATE: Meeting of October 24, 2019

SUBJECT: Nexus Study

Please find attached the completed draft of the nexus study and the power point presentation for the Committee of the Whole meeting. Our consultant, Robert Gray, with Strategic Planning Group, Inc. will present the findings of the nexus study at the meeting. In addition to the Committee of the Whole meeting, staff is coordinating a public meeting on November 19, 2019 for the consultant to present the nexus study to the public and allow questions and comments on the study.

Background:
On March 22 and April 19, 2018, staff participated in Committees of the Whole with City Council to discuss affordable housing. These meetings included discussion of the City's current strategy, inventory, needs and programs in relation to affordable and workforce housing. In addition, the discussion included potential action items to reduce the cost burden of housing on households in the City. At the April 19, 2018 Committee of the Whole, Councilmember Foster made a motion, which was seconded and approved by the Committee, for staff to bring forward a more detailed discussion of a nexus study. A nexus study could provide a legally justifiable link between new development and the need for affordable housing, which is a necessary prelude to consideration of an affordable housing impact fee, also known as a linkage fee.

On September 13, 2018, staff made a presentation to the Budget, Finance & Taxation (BF&T) Committee that included:

- Explanation of an affordable housing linkage fee
- Requirement for a nexus study
- Examples of jurisdictions with existing linkage fees
- Review of 2007 nexus study
- Potential Scope of Work for a new nexus study
- Potential revenue

- Additional linkage fee considerations
- Public outreach; and
- A request to move forward with a nexus study

The Committee authorized staff to move forward with a Request for Proposals (RFP) for a nexus study. The approved motion also required staff to bring back to the Committee the selected response for approval prior to an award, regardless of cost.

On January 24, 2019, the BF&T Committee approved an award to Strategic Planning Group, Inc. to conduct the nexus study.

CC: Mayor Kriseman
Deputy Mayor Tomalin
Tom Greene, Assistant City Administrator
Alan DeLisle, City Development Administrator
Jackie Kovilaritch, City Attorney
Michael Dema, Assistant City Attorney
Bradley Tennant, Assistant City Attorney
Joshua Johnson, Director of Housing and Community Development
Elizabeth Abernethy, Planning Director
Derek Kilborn, Manager, Urban Planning & Historic Preservation

Attachments: Nexus Study Completed Draft
Power Point Presentation

CITY OF ST. PETERSBURG ATTAINABLE/WORKFORCE HOUSING AND LINKAGE STUDY (2019)

100% DRAFT

Prepared by:

Strategic Planning Group, Inc.

Excellence • Planning • Development Consultants

GLOBAL EXPERIENCE FOR LOCAL SOLUTIONS

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October, 2019

TABLE OF CONTENTS

TABLE OF CONTENTS....2
Contractual Understanding....5
General Limiting Conditions....6
Executive Summary....7
Demographics....7
Household Income....7
Labor Dynamics....7
Housing Characteristics....7
Household by Tenure....7
Household Size....8
Housing Values....8
Housing Supply....8
Housing Costs....8
Barriers to Workforce/Attainable Housing....9
Linkage Fees....9
Linkage Fee....10
Residential....10
Nonresident....10
Chapter 1: Workforce/Attainable Housing....12
Overview....12
The Need for Workforce/Attainable Housing....12
What is Workforce/Attainable Housing....12
Definition....13
Affordability – A Bad Name....14
Workforce Housing....14
Workforce Housing – An Effective Private/Public Partnership with Local Government....14
Defining Local Workforce Housing....15
Chapter 2: Housing Market Demand....16
ACS 2017 DEMOGRAPHICS....16
Race/Ethnicity....17
Demographics....18
Income....19
Labor Force....20
Labor Dynamics....20
ESRI 2018-2023 Socio Economic Estimates/Projections....21
ESRI EMPLOYMENT/BUSINESSES....21
Housing Characteristics....22
Age of Housing Stock....23
Number of Bedrooms....24
Household by Tenure....24
Housing Values....25

Household Income 26
Housing Affordability 26
Chapter 3: Housing Supply 28
St. Petersburg Housing Metrics 28
2019 MLS Housing Data 29
Rental Market 30
Rent Summary 34
Chapter 4: St. Petersburg's Workforce/Attainable Housing Needs 35
Workforce Housing Needs 35
Ownership 35
Renter Households 35
Defining the workforce housing gap 36
Relationship Between Job Growth And Population Growth 36
Demand 36
Housing Affordability 36
Identifying Existing Occupations and Wages 37
Adjustment from Employees to Employee Households 38
Ownership Housing Supply 39
GAP Analysis 39
Chapter 5 Linkage fee Analysis 40
Linkage Fee Nexus 40
Residential Linkage/Impact Fees 40
Income and Household Size Assumptions 40
Current Housing Costs 40
Housing Affordability Gap 41
Ownership Housing Affordability Gap/Linkage Fee 41
Rental/Owner Housing Affordability Gap 42
Nonresidential Linkage Fee 44
Nonresident Nexus Study 44
Nonresidential Affordability/Linkage Analysis 45
Analysis Approach and Framework 45
Adjustment for Commute Relationship 56
Total linkage costs 56
Straight Workforce Housing Permit Fee 60
Chapter 6: Linkage fee impact on development 61
Pro forma Analysis 61
Description of Prototypes Used In The Analysis 61
Financial Analysis 64
Exemptions 65
Potential Workforce Housing Impact Fee Revenue 65
Alternative to Fee Payment 66
Appendix 67
Developer Fee Comparison 68

TAMPA DEVELOPER AND MOBILITY FEES....77
TAMPA MOBILITY FEE....79
PINELLAS COUNTY DEVELOPER AND MOBILITY FEES....80
MOBILITY FEE....84
CLEARWATER DEVELOPER AND MOBILITY FEES....85
HILLSBOROUGH COUNTY DEVELOPER AND MOBILITY FEES....92
HILLSBOROUGH COUNTY MOBILITY FEE....96
WORKFORCE HOUSING EXAMPLES....97

CONTRACTUAL UNDERSTANDING

Strategic Planning Group, Inc. (SPG) entered an agreement with the City of St. Petersburg (Client), to prepare a Workforce/Attainable Housing study for the City. The scope of work detailed the following tasks:

(1) Housing Market Affordability Gap Analysis to include:
- (a) Household incomes and affordable payments
- (b) Current market conditions in relation to household incomes
- (c) Document the need for affordable housing

(2) Development Feasibility
- (a) Develop sample pro-formas for residential and non-residential development to determine developer profit under current market conditions. Pro-formas should include current City of St. Petersburg permitting and impact fee costs.
- (b) Compare City of St. Petersburg permitting and impact fee costs to surrounding communities to determine any competitive disadvantage that could be created by an affordable housing linkage fee

(3) Nexus Analysis and Maximum Justifiable Linkage Fees
- (a) Provide a legally defensible basis/nexus for the adoption of a residential and non-residential linkage fee ordinance by demonstrating the link, if any, between future development and an increasing need for new units of affordable housing
- (b) Provide maximum justifiable linkage fee for residential development on a per square foot basis based on nexus to affordable housing need created
- (c) Provide a recommended linkage fee for residential development on a per square foot basis based on nexus to affordable housing need created and adjusted for market conditions, permitting cost and developer profit
- (d) Provide maximum justifiable linkage fee for non-residential development on a per square foot basis based on nexus to affordable housing need created
- (e) Provide a recommended linkage fee for non-residential development on a per square foot basis based on nexus to affordable housing need created and adjusted for market conditions, permitting cost and developer profit
- (f) Provide an analysis of revenues produced at varying amounts of residential and non-residential linkage fees, and provide a calculative basis for the analysis

GENERAL LIMITING CONDITIONS

SPG does not warrant this report for use other than by the City of St. Petersburg, Florida, and assumes no responsibility for secondary use of this study or information contained herein by third parties. Although data and other information used in this study and analysis is believed to be factual, evaluations and projections are subject to a number of variables and unforeseen factors such as major economic changes or shifts in the local, regional, national or global economies. Accordingly, while the forecasts and projections have been prepared in accordance with acceptable techniques and consistent with available information, SPG cannot guarantee their attainment. We wish to note, however, that the analysis and conclusions represent the best judgment of the consultant, based on information compiled and evaluated within the scope of the Agreement with the Client for this project.

The use of the words "forecast" or "projection" within the report relates to broad expectations of future events or market conditions and the quantification of estimates or assumptions and is not considered a "forecast" or "projection" as defined by the American Institute of Certified Public Accountants.

EXECUTIVE SUMMARY

The City of St. Petersburg retained Strategic Planning Group, Inc. to prepare an Attainable/Workforce Housing Program based on the City's specific socio-economic metrics (demographics, household income, etc.). This report utilizes a number of data sources including; US Census Bureau; American Community Survey 2013-2017; University of Florida Bureau of Business Research; Pinellas County Appraiser Office; Pinellas County Realtor MLS and special proprietary computer program runs from REIS and from ESRI.

DEMOGRAPHICS

The University of Florida, Bureau of Business Research (BEBR) estimated that the City had a population of 266,076 as of April 2018 an increase of 21,307 since 2010 (or 2,131persons per year). Data from the US Census (American Community Survey) estimated the City's July 1, 2018 resident population at 265,098[1]. According to the 2017 ACS[2], the City had a median age of 42.6 with 21.5 percent of the population aged 62 or more.

HOUSEHOLD INCOME

St. Petersburg is one of Pinellas County's 24 cities. St. Petersburg's median household income was estimated at $55,134 in 2017 based on the latest Bureau of Census, American Community Survey (ACS) data. It should be noted that the City's Housing & Community Development Department is required to use the HUD 2019 Tampa/St. Petersburg/Clearwater Metropolitan Statistical Area **(MSA)** median family income (MFI) limits adjusted by the number of persons in the family during the administration of the City's Entitlement Grant Programs (which for a 4 person family is $66,900). This Nexus Study relies on the use of the 2017 ACS median household data[3] for the **City of St. Petersburg**. The 2017 median household data for the City was inflated to 2019 using the same methods as used by HUD which is $57, 700 as of 2019.

LABOR DYNAMICS

Based on Census data, the City of St. Petersburg had 113,598[4] jobs within its boundaries. Of that number, 37,757 jobs (33.2%) were held by City residents. The other 75,841 workers resided outside of the city (66.8 percent).

HOUSING CHARACTERISTICS

The number of housing units in St. Petersburg, as reported by the American Community Survey 2013-2017[5], was estimated to be 131,356 units in 2017. Approximately 18 percent of the City's housing inventory is vacant of which most are held for seasonal use. It is estimated that 56 percent of the total housing units in the City were single-family detached units. Multi-family housing of five or more units accounted for 21 percent of the total units of which multi-family housing of 20 units or more accounted for 17 percent of the housing stock.

HOUSEHOLD BY TENURE

Slightly more than 58 percent of the City's occupied housing is owner occupied (62,296 units) and 42 percent is renter occupied (44,981).

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[1] UF BEBR estimated the City's 2018 at 266,076

[2] American Community Survey 5 year 2013-2017

[3] Median household income includes both family and nonfamily households and therefore is lower than family income.

[4] Onthemap (Census) for 2015, latest data available

[5] The 2013-2017 ACS data was released in December 2018 and is the latest data available

Household Size

According to the ACS 2017, housing tenure within the City by household size indicates approximately 74 percent of the occupied housing units are made up of one and two person households. Conversely, the number of owner occupied units with four or more person households account for 12 percent of the occupied units.

Housing Values

The ACS 2017 reports that the City's median value of owner occupied units was $165,000 It should be noted that this is what homeowners assumed their homes were valued at as opposed to what actual sales were in 2017. The median monthly housing cost for households was $1,010. There was only a slight difference in median monthly housing costs between owner occupied households ($1,004) and renter occupied households ($1,015).

Local Multiple Listing Service data indicates, that for the first two months of 2019, the median combined sales price for a single family and townhouse/condominium homes was $249,188, an increase of 82 percent over 2014 median sales prices. The median price for a single family home was $235,515, an increase of 69 percent over 2014's median sales price while townhouse/condominium median sales price was $280,000, an increase of 123 percent since 2014. It should be noted that the 2014 sale prices reflect the low end of Florida's housing crash (recession).

Housing Supply

St. Petersburg had 8,884 residential sales based on MLS data in 2018, averaging 740 residential sales monthly. Median sales price of all residential properties as reported by MLS was $220,000 at the end of 2018.

January/February 2019 MLS data shows that there were 1,369 single family homes sales, with 599 sales of less than $200,000 or 44 percent of all sales. There were 837 townhomes and condominiums sold during the same time period of which 54 percent sold for under $200,000.

Housing Costs

The U.S. Department of Housing and Urban Development (HUD) suggests that housing costs should not exceed 30 percent of total monthly household income. Based on the 2017 ACS estimates, 34 percent of homeowners paid 30 percent or more of their household income for housing while over 52 percent of renters in the City paid over 30 percent or more for housing.

Adjusting the City's 2017 median "family household" income ($75,582) to $79,100 for 2019, a family could afford to pay $1,681 for rent or afford a home priced $357,400. A median income family could afford the median asking price for single and multifamily housing based on MLS data. It should be noted that only 53 percent of the City's households are defined as "family households".

This report defines workforce housing as those households with household incomes ranging from 60 percent of the City's "median household income" to 120 percent of the City's "median household income" which is estimated at $57,700. It should be noted that HUD metrics for affordable housing are based on the Tampa-St. Petersburg-Clearwater MSA median family income of $66,900 to set income limits which is significantly lower than the City's median family income of $79,100.

As shown below, a household with a median household income (family and non-family households)[6] can afford $1,443[7] rent or afford to purchase a home, assuming a down payment of 10 percent, priced at $229,369. A household earning only 60% of the City's median household income can afford $866 rent or a $123,859 home assuming good credit and little debt which is significantly lower than the current real estate market.

Table ES 1: St. Petersburg Median Household Income Affordability Calculator

Affordability Calculator Median Household Income 2019:			
Downpayment	10%	**Utilities**	15%
Cost Burden	30%	**Tax & Ins**	20%
Interest Rate	4.25%	**Other Debt**	12%

Income Category	Median Income (%)	Household Income	Monthly Rent	Monthly Payment	Payment - Tax & Ins	Amt of Mortgage	Home Price
Very Low	50%	$28,850	$721	$635	$508	$103,216	$103,216
Very Low	60%	$34,620	$866	$762	$609	$123,859	$123,859
Low	80%	$46,160	$1,154	$1,016	$812	$165,145	$183,495
Median	100%	$57,700	$1,443	$1,269	$1,016	$206,432	$229,369
Moderate	120%	$69,240	$1,731	$1,523	$1,219	$247,718	$275,242

Source: Strategic Planning Group, Inc.

Barriers to Workforce/Attainable Housing

Increasing land prices and construction costs have collectively impacted the residential development community's ability to provide workforce/attainable housing in both the City and County.

Linkage Fees

Linkage fees are a means for local government to collect monies to help support affordable/workforce housing. These fees, collected from market rate residential development and non-residential development, are placed in a trust fund to provide for the construction and maintenance of affordable residential units.

Under Florida law, there must be a rational relationship between the linkage/mitigation fee imposed and the impact of new construction on the need for affordable workforce housing.

At both the national and local level, governments are being forced to determine the impacts that new market rate residential and non-residential developments create and the need for housing that is affordable to the workforce, as a legal basis for establishing a workforce housing mitigation program.

A Nexus study provides the required information for the workforce housing need created by new developments and provides statistical support for the fee calculation. The fee is typically calculated on a square foot basis or a per unit basis for residential.

[6] In 2019 dollars
[7] Assuming utilities of 15%

LINKAGE FEE

RESIDENTIAL

The proposed maximum residential impact fee is based on the construction of a new two bedroom apartment as explained further in the report. The combined affordability GAP 0-120% AMI is -$33.94 per square foot. If the impact fee was based only on moderate household income (80-120% AMI) the impact fee would be $18.15 per square foot.

Table ES 2: Summary of the Proposed Maximum Residential Impact Fee

Residential	Median Household Income PSF
GAP	($33.94)
GAP (60-80%)	($20.53)
GAP (80-120%)	($18.15)

Note: see table 40 in the report

NONRESIDENT

The following tables summarize the potential impact fees to various types of development. Table ES 3 shows the maximum possible fees based on new residential construction required to house additional employees.

Table ES 3: Summary Nonresidential Linkage Fee Based on New Construction Data

	Industrial	Commercial	Office	Hotel	Extended Stay
Rental					
Very low income	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
Low income	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
Moderate income	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
Rental	**-$40.18**	**-$72.61**	**-$59.99**	**-$32.53**	**-$4.09**

Note: see table 63 in the report

The St. Petersburg housing market is very active and balanced and provides another source of workforce housing. The linkage fees shown in Table 67, presented later in the report, are a realistic assessment of St. Petersburg attainable/workforce housing market. They should be seen as a beginning point rather than the final fee structure. Most, if not all governmental entities adjusted the final fees to reflect local economic and political conditions. Should the City adopt linkage/impact fees, those fees should be subject to CPI increases.

Table ES 4: Summary Nonresidential Linkage Fee based on MLS Data

	Industrial	Commercial	Office	Hotel	Extended Stay Hotel
Townhome					
Very low income	-$3.33	-$3.82	-$10.34	-$10.15	-$0.58
Low income	-$0.05	-$0.11	-$0.04	$0.00	$0.00
Moderate income	$4.77	$3.21	$11.92	$1.32	$0.09
Total	$1.38	-$0.72	$1.53	-$8.83	-$0.49
Single Family					
Very low income	-$5.79	-$10.61	-$28.74	-$28.21	-$1.61
Low income	-$9.23	-$31.93	-$11.59	$0.00	-$1.20
Moderate income	$2.07	$2.23	$8.28	$0.92	$0.07
Total	-$12.94	-$40.31	-$32.05	-$27.29	-$2.75
Combined					
Very low income	-$9.12	-$14.43	-$39.08	-$38.37	-$2.19
Low income	-$9.28	-$32.04	-$11.63	$0.00	-$1.21
Moderate income	$6.84	$5.44	$20.20	$2.24	$0.16
Total	-$11.56	-$41.03	-$30.51	-$36.13	-$3.24

Note: see table 67 in the report

Typically, communities do not impose maximum linkage fees because there are other tools communities can use to increase the supply of affordable housing, and the linkage fee becomes one source of funding among several to subsidize attainable and workforce development. For example, the City of St. Petersburg uses the following funding sources to assist developers with the construction and preservation of attainable and workforce units: State Housing Initiative Partnership (SHIP), HOME Investment Partnership (HOME), Penny for Pinellas revenue, City owned land, South St. Petersburg Tax Increment Financing (TIF) revenue and Floor Area Ratio (FAR) bonus revenue.

In addition, St. Petersburg has several land use incentives in place to encourage the construction of attainable and workforce housing, including: Workforce Density Bonus Units, Accessory Dwelling Units, reduced parking requirements, reduced design requirements, and expedited permitting.

CHAPTER 1: WORKFORCE/ATTAINABLE HOUSING

OVERVIEW

Like other areas of the United States that have experienced rapid growth and rising home prices, Pinellas County and the City of St. Petersburg have reached the point where "affordability" of housing has become a critical "regional" issue. Many residents and organizations indicated workforce/attainable housing as a possible "critical concern" and a future detriment to economic development in Pinellas County. Thus, the following study was commissioned to dimension supply and demand of workforce/attainable housing.

THE NEED FOR WORKFORCE/ATTAINABLE HOUSING

The "American Dream" for every family is to have a comfortable home to rent or buy in a safe neighborhood that is available within the family budget and that is reasonably close to the wage earner's place of employment. Unfortunately, for many families throughout Pinellas County, it is not currently possible to fulfill that dream, because they are unable to find adequate housing that they can afford even given the historically low-mortgage interest rates.

Influenced by many factors including changes in demographic trends, income growth and housing construction costs, the need for workforce/attainable housing has reached what some feel is crisis proportion in Pinellas County and the Tampa/St. Petersburg region. The steepest decline in home ownership nationwide has been the 25-34 year old age group. Recent census data shows that for the first time there are more young adults living in their parents' home than in other types of housing. The members of this group are the most likely to be first time homebuyers. Illustrating that home ownership is not only tenure; it is a way of life. Community stability and a sense of neighborhood are corollaries of home ownership that are important both for individuals and for Pinellas County and the City of St. Petersburg.

Nationwide major demographic changes continue to result in more households, smaller households[8], an increased elderly population, and other changes to household composition. The new, dominant configurations of household growth are divided in the following way: a) 48 percent married couple families, and b) 52 percent single parent families and non-family households based on the 2010 US Census and the American Community Survey, 2013-2017 (latest data available). The housing needs of these different groups, many of whom account for a large share of low and moderate income households, are currently not being met by the private sector. The normal filtration process, in which existing housing filters down to households at a lower economic level or to the poor, has been greatly constrained by the increasing number of smaller households that have formed as well as competition from the baby-boom generation who are aging in place.

WHAT IS WORKFORCE/ATTAINABLE HOUSING

What is attainable housing? The term often appears in the media without definition - attainable to whom? There are persons for whom virtually any housing is attainable, and still others for whom almost nothing is attainable. Thus, "attainable" describes a relationship between two variables - the income of consumers (buyers and renters) and the cost (price) of the product (houses and apartments). Significant changes in either of these two variables can produce or lose attainable housing.

[8] Under the U.S. Census Bureau definition, family households consist of two or more individuals who are related by birth, marriage, or adoption, although they also may include other unrelated people. Nonfamily households consist of people who live alone or who share their residence with unrelated individuals.

"Attainable housing" is important not only to those who cannot afford market rate housing, but also to those communities that do not have a sufficient supply of attainable housing to support a vibrant and growing economy. New employees, for example, cannot be attracted to growing businesses where available housing is beyond their reach. This does not include a new national trend that has recently impacted many communities nationally, namely communities that cannot house their own municipal employees for lack of attainable housing.

The term is also used to mean housing that the private market does not produce on its own; i.e., housing that requires some form of subsidy, in the case of rental housing, to the tenant, developer or owner, and in the case of homeownership, to the buyer and/or developer. Whether, and to what extent a subsidy is required is a function of the disparity between the two variables mentioned above, and this varies by markets in which the housing is to be provided.

Thus, to determine the extent to which attainable workforce housing is needed in St. Petersburg, it is imperative to study the relationship between these variables, individual/household income and product prices. These are key components in examining the demand supply equation for any given market area.

DEFINITION

Federal government guidelines, primarily those developed by the U.S. Department of Housing and Urban Development (HUD), attainable housing cost to an owner or renter should not exceed any more than 30 percent of the household's gross monthly income for housing costs, including utilities. HUD determined the median family income for Pinellas County at $66,900 for 2019. Based on American Community Survey (ACS) data, the City of St. Petersburg had a median family income of $75,582 and a median household income of $55,134 in 2017. SPG estimates that for 2019 median family income is $79,100 and median household income is $57,700.

There are state and federal income guidelines that serve as thresholds for various housing programs. Income limits are set in accordance with federal statutes that use four person income limits as a starting point.

Federal guidelines generally define very low income as less than 30 percent of the local Area Median Income (AMI), low income as greater than 30 percent but no more than 50 percent AMI, and moderate income as greater than 50 percent but no more than 80 percent AMI. When used by the federal government, "low and moderate income" refers to all households with income at or below 80 percent AMI.

The State of Florida uses a different definition that includes very low income as a household that does not exceed 50 percent AMI, low income as a household income that does not exceed 80 percent, AMI and moderate income as a household income that does not exceed 120 percent AMI.

Most federal and state housing assistance programs are oriented to households earning less than 80 percent AMI.

Workforce housing, on the other hand, is usually defined as households earning between 80 percent AMI and 120 percent AMI. The definition of attainable workforce housing has been modified by communities throughout the United States to include an upper 140 percent median family income bracket, as well as, a cost burden as high as 40 percent.

To determine whether and to what extent attainable housing is needed, the relationship between these variables - individual incomes and product prices needs analysis.

Affordability – A Bad Name

There seems to be a national trend for communities to look at attainable housing developments as "Public Housing" which it is not. Increasingly, the communities have attempted to rename the concept and redirect or re-educate the public as to its nature. A number of communities now refer to it as "contemporary attainable housing" or "moderate priced dwelling units" or even "workforce housing" to more adequately reflect those who need this type of housing. The following narrative is an attempt to redefine the concept and its need.

Workforce Housing

Today's workforce housing provides a stepping-stone for young families, a smaller, more manageable home for seniors, or creates housing for the city's workforce. Workforce housing focuses on providing homes for public employees, teachers, public safety personnel and employees of small and large businesses in the city. Most communities that define "workforce housing" use HUD's moderate income level of 80 percent-120 percent of the Area's Median Income (AMI).

Workforce housing helps businesses remain in the city and county and helps public employees live closer to their jobs. Workforce housing can be ownership or rental, a two-family house, accessory apartment, townhouse or typical market-rate apartment unit.

The Florida Housing Coalition in its 2019 Housing Matters Report notes that with passage of Florida's Sadowski Act state and local housing trust funds are projected to have the following economic impact on the State of Florida:

- 30,871 jobs
- $4.4 billion in total economic output
- $1.1 billion in labor income

Workforce Housing – An Effective Private/Public Partnership with Local Government

Workforce housing is developed by private developers, often non-profits, many of which are local community or faith based organizations using a combination of rental income, private financing, income from sales and government subsidies. Other workforce housing is developed by the private sector through inclusionary zoning. Funding and technical assistance are also available from private lenders and the sale of ownership units. Other communities have created numerous other tools to assist in the production of workforce housing including: "New Homes Construction Funds", "New Homes Land Acquisition Funds" and Inclusionary Zoning to assist with the development of workforce housing. Over the past decade, many communities in Florida and throughout the nation have shown that partnerships among local government, non-profit housing developers, community leaders and private financial institutions can create attractive, successful workforce housing developments that not only serve residents, but are an asset to the broader community.

In addition to helping residents, workforce housing benefits the wider community in significant ways:

- Providing housing for the local workforce
- Revitalizing distressed areas
- Directing economic benefits to the local community, such as increased jobs and sales taxes
- Reducing long distance commuter traffic and improving air quality
- Promoting economic integration while building community
- Social impacts including improved community health and education

Defining Local Workforce Housing

The costs of rental and owner occupied housing in Pinellas County have increased in recent years, but to determine the relative affordability of housing first requires a definition of "Workforce" housing. The concept of what is workforce housing is relative. A family or individual earning $100,000 a year might find that at $700,000 their "dream" home is unattainable; nevertheless, safe, adequate housing is available at their current income level.

Affordability becomes a problem when a family at any income level, but especially those earning at the median household income or less, does not have the opportunity to purchase or rent, decent and safe housing. For this study, workforce affordability is defined as: housing costs (rental or ownership) for households earning between 80 and 120 percent of the City's median household income as defined by HUD (estimated at $55,134 for 2017)[9]. For example, a household earning 80 percent of the median 2019 household income ($57,700) could purchase a home valued at $208,600[10]. A renter household making 80 percent of the city median household income could theoretically afford a gross rent of $981 which includes utilities.

The following discussion is an examination of numerous other factors that influence the City's overall demand for housing and its current and projected inventory or supply.

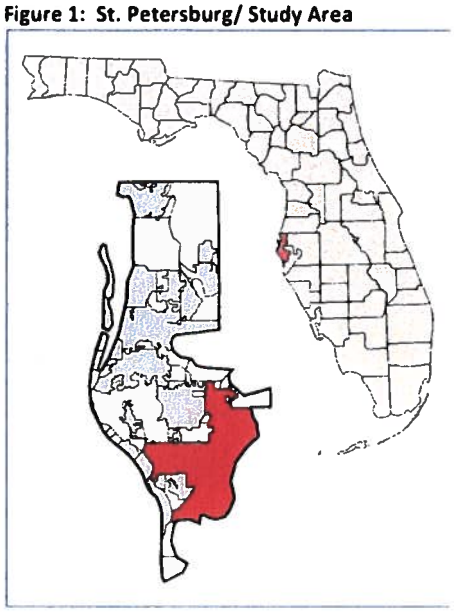
[9] ACS 2013-2017

[10] Assuming a 4.25 percent, 30 year mortgage, 10% down payment

CHAPTER 2: HOUSING MARKET DEMAND

The City of St. Petersburg lies within Pinellas County and is part of the four county, Tampa-St. Petersburg-Clearwater Metropolitan Statistical Area (MSA). The St. Petersburg Study Area is shown in Figure 1.

Figure 1: St. Petersburg/ Study Area



Source: By Arkyan https://commons.wikimedia.org/w/index.php?curid=2687602

The City of St. Petersburg is the largest of the County's 24 cities.

Table 1 shows population trends for City of St. Petersburg. As shown, the majority of the City's growth occurred prior to 1990. For the most part the City is built-out and growth will be the result of redevelopment and an increase in density.

Table 1: Population Trends, 1890- 2018

Historical population			
Census	Pop.	%±	Annual Gain
1890	273	—	
1900	1,575	476.90%	130
1910	4,127	162.00%	255
1920	14,237	245.00%	1,011
1930	40,425	183.90%	2,619
1940	60,812	50.40%	2,039
1950	96,738	59.10%	3,593
1960	181,298	87.40%	8,456
1970	216,159	19.20%	3,486
1980	238,647	10.40%	2,249
1990	238,629	0.00%	-2
2000	248,232	4.00%	960
2010	244,769	-1.4%	-346
Est. 2018	**266,076**	**8.70%**	**2,131**

Source: Wikipedia, University of Florida (BEBR); US Census; Strategic Planning Group, Inc., 2019.

The primary source of demographic, housing and income data is derived from the U.S. Census Bureau's American Community Survey (ACS). The U.S. Census recommends that a five-year time series be used for analysis purposes due to small scale surveys used to collect data (especially in smaller areas); therefore the bulk of the census data used in this report relies on the five year 2013-2017 data[11]. SPG also used ESRI Business data for 2018.

ACS 2017 DEMOGRAPHICS

The US Census estimated that the City had a 2017 population 256, 301[12]. Approximately 21.5 percent of the City's population were 62 years or older.

[11] 5-year ACS 2013-17

[12] Census data released on May 29, 2019, estimate the City's population at 265,098

Table 2: St. Petersburg Demographics

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
AGE				
Total population	256,031	+/-49	256,031	(X)
5 to 9 years	12,506	+/-789	4.90%	+/-0.3
10 to 14 years	13,140	+/-841	5.10%	+/-0.3
15 to 19 years	13,375	+/-679	5.20%	+/-0.3
20 to 24 years	16,968	+/-945	6.60%	+/-0.4
25 to 34 years	36,613	+/-1,321	14.30%	+/-0.5
35 to 44 years	30,948	+/-1,001	12.10%	+/-0.4
45 to 54 years	37,640	+/-1,171	14.70%	+/-0.5
55 to 59 years	19,810	+/-789	7.70%	+/-0.3
60 to 64 years	17,366	+/-954	6.80%	+/-0.4
65 to 74 years	24,657	+/-914	9.60%	+/-0.4
75 to 84 years	13,856	+/-748	5.40%	+/-0.3
85 years and over	6,735	+/-610	2.60%	+/-0.2

Source: U.S. Census American Community Survey (2013-2017), 2019

RACE/ETHNICITY

The City comprises a diverse racial composition. The City's White population comprised 72 percent of the City's population followed by African American at 25 percent and Asian at 4 percent.

Table 3: St. Petersburg Racial Composition, 2017

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
Race alone or in combination with one or more other				
Total population	256,031	+/-49	256,031	(X)
White	184,282	+/-2,107	72.00%	+/-0.8
Black or African American	63,550	+/-1,850	24.80%	+/-0.7
American Indian and Alaska Native	1,991	+/-351	0.80%	+/-0.1
Asian	10,501	+/-1,060	4.10%	+/-0.4
Native Hawaiian and Other Pacific Islander	248	+/-173	0.10%	+/-0.1
Some other race	3,955	+/-893	1.50%	+/-0.3

Source: U.S. Census American Community Survey (2013-2017), 2019

The City had a small but growing Latino population which was estimated to account for almost eight percent of the City's population in 2017.

Table 4: St. Petersburg Ethnicity, 2017

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
HISPANIC OR LATINO AND RACE				
Total population	256,031	+/-49	256,031	(X)
Hispanic or Latino (of any race)	19,555	+/-1,456	7.60%	+/-0.6
Mexican	3,490	+/-688	1.40%	+/-0.3
Puerto Rican	5,989	+/-1,148	2.30%	+/-0.4
Cuban	3,327	+/-635	1.30%	+/-0.2
Other Hispanic or Latino	6,749	+/-745	2.60%	+/-0.3
Not Hispanic or Latino	236,476	+/-1,458	92.40%	+/-0.6

Source: U.S. Census American Community Survey (2013-2017), 2019

DEMOGRAPHICS

The City is estimated to have a resident population of 265,098 as of July 1, 2019[13] and increase of 21,307 since 2010 (or 2,131 persons per year) and the largest growth since the 1980s. Data from the US Census (American Community Survey) estimated the City's 2017 resident population 256,031 in 2017. According to the 2017 ACS[14], the City's had a median age of 42.6 with 21.5 percent of the population aged 62 or more.

Table 5: Resident Age, ACS 2017

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
Median age (years)	42.6	+/-0.6	(X)	(X)
Under 18 years	46,186	+/-1,169	18.00%	+/-0.5
16 years and over	215,092	+/-1,190	84.00%	+/-0.5
18 years and over	209,845	+/-1,170	82.00%	+/-0.5
21 years and over	201,050	+/-1,304	78.50%	+/-0.5
62 years and over	55,141	+/-1,043	21.50%	+/-0.4
65 years and over	45,248	+/-950	17.70%	+/-0.4

Source: U.S. Census American Community Survey (2013-2017), 2019

St. Petersburg is demographically comprised primarily of a White population which represents74 percent of the City's population with a growing Hispanic population which accounts for 28.8 percent of the population according to the U.S. Census (Hispanics are defined by the Census as either Black or White according to ACS 2017 data).

[13] The University of Florida, Bureau of Business Research (BEBR) estimated that the City's had a population of 266,076 as of April 1, 2018

[14] American Community Survey 5 year 2012-2017

Table6: St. Petersburg Race/Ethnicity, ACS 2017

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
HISPANIC OR LATINO AND RACE				
Total population	256,031	+/-49	256,031	(X)
Hispanic or Latino (of any race)	19,555	+/-1,456	7.60%	+/-0.6
Mexican	3,490	+/-688	1.40%	+/-0.3
Puerto Rican	5,989	+/-1,148	2.30%	+/-0.4
Cuban	3,327	+/-635	1.30%	+/-0.2
Other Hispanic or Latino	6,749	+/-745	2.60%	+/-0.3
Not Hispanic or Latino	236,476	+/-1,458	92.40%	+/-0.6
White alone	161,439	+/-2,024	63.10%	+/-0.8
Black or African American alone	57,914	+/-1,816	22.60%	+/-0.7
American Indian and Alaska Native alone	474	+/-156	0.20%	+/-0.1
Asian alone	8,438	+/-931	3.30%	+/-0.4
Native Hawaiian and Other Pacific Islander alone	126	+/-86	0.00%	+/-0.1
Some other race alone	1,347	+/-652	0.50%	+/-0.3
Two or more races	6,738	+/-917	2.60%	+/-0.4

Source: U.S. Census American Community Survey (2013-2017), 2019

INCOME

Based on Census data, the City's median household income was $55,134[15] in 2017. Median income ranged from $85,853 for married families to $37,353 for nonfamily households.

Table 7: St. Petersburg Household Income by Type of Household, 2017

Subject	St. Petersburg city, Florida							
	Households		Families		Married-couple families		Nonfamily households	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total	109,834	+/-3,550	56,876	+/-2,334	40,657	+/-2,218	52,958	+/-3,494
Less than $10,000	6.30%	+/-1.0	3.40%	+/-1.2	2.70%	+/-1.4	9.60%	+/-1.7
$10,000 to $14,999	4.90%	+/-1.3	2.00%	+/-1.0	0.70%	+/-0.6	8.40%	+/-2.3
$15,000 to $24,999	11.50%	+/-1.7	7.80%	+/-2.0	4.00%	+/-1.4	15.90%	+/-2.6
$25,000 to $34,999	9.50%	+/-1.4	8.10%	+/-1.9	6.90%	+/-2.1	11.30%	+/-2.3
$35,000 to $49,999	12.70%	+/-1.6	11.30%	+/-2.2	8.90%	+/-2.2	14.40%	+/-2.4
$50,000 to $74,999	19.10%	+/-2.2	16.60%	+/-2.7	14.90%	+/-2.7	20.70%	+/-3.3
$75,000 to $99,999	13.40%	+/-2.0	18.50%	+/-2.7	21.80%	+/-3.1	8.60%	+/-1.8
$100,000 to $149,999	11.70%	+/-1.4	16.30%	+/-2.4	19.40%	+/-3.1	6.20%	+/-1.5
$150,000 to $199,999	4.80%	+/-1.0	6.30%	+/-1.4	8.20%	+/-1.7	2.30%	+/-1.1
$200,000 or more	6.20%	+/-1.1	9.60%	+/-1.8	12.60%	+/-2.4	2.60%	+/-0.9
Median income (dollars)	$55,134	+/-2,688	$75,582	+/-3,471	$85,853	+/-3,267	$37,353	+/-3,724
Mean income (dollars)	$80,310	+/-4,334	$103,097	+/-8,133	N	N	$54,117	+/-4,110

Source: U.S. Census American Community Survey (2017), 2019

Family income is directly related to the number of wage earners in the household. It ranges from $53,329 for one earner households to $109,165 for three or more wage earners. Forty percent of the City's working households have one wage earner and 60 percent have over two wage earners. The median income for a two wage earner household was $92,221 in 2017.

[15] These figures are based on 1 year ACS estimates. SPG used the one year estimate for income due to the impacts that the recession has on the 2013-2017 trends.

Table 8: Number of Wage Earners. 2017

Subject	St. Petersburg city, Florida					
	Number		Percent Distribution		Median income (dollars)	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
FAMILY INCOME BY NUMBER OF EARNERS						
No earners	11,553	+/-1,558	20.30%	+/-2.4	$49,181	+/-10,867
1 earner	18,424	+/-2,131	32.40%	+/-3.3	$53,329	+/-7,345
2 earners	22,222	+/-1,754	39.10%	+/-3.2	$92,221	+/-5,789
3 or more earners	4,677	+/-953	8.20%	+/-1.7	$109,165	+/-13,246

Source: U.S. Census American Community Survey (2013-2017), 2019

The City's median household income was estimated at $55,134 but ranged from $85,853 for married households to $37,353 for nonfamily households, in 2017.

Labor Force

American Community Survey data shows that the City had 215,092 residents aged 16 years and older of which 63.1 percent were in the labor force as of 2017.

Table 9: Employment Status, 2017

Subject	St. Petersburg city, Florida							
	Total		Labor Force		Employment/Population		Unemployment rate	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Population 16 years and over	215,092	+/-1,190	63.10%	+/-0.8	58.70%	+/-0.9	6.50%	+/-0.6
AGE								
16 to 19 years	10,499	+/-624	37.30%	+/-4.1	28.80%	+/-3.7	22.30%	+/-5.1
20 to 24 years	16,968	+/-945	72.30%	+/-3.3	62.10%	+/-3.7	12.80%	+/-2.9
25 to 29 years	18,503	+/-902	83.30%	+/-2.7	77.50%	+/-2.9	5.80%	+/-1.7
30 to 34 years	18,110	+/-841	83.70%	+/-2.2	78.40%	+/-2.6	5.90%	+/-1.5
35 to 44 years	30,948	+/-1,001	84.80%	+/-1.5	79.90%	+/-1.7	5.40%	+/-1.1
45 to 54 years	37,640	+/-1,171	82.30%	+/-1.4	77.50%	+/-1.7	5.50%	+/-0.9
55 to 59 years	19,810	+/-789	71.30%	+/-2.5	67.70%	+/-2.5	5.00%	+/-1.2
60 to 64 years	17,366	+/-954	56.40%	+/-2.6	53.80%	+/-2.6	4.70%	+/-1.1
65 to 74 years	24,657	+/-914	26.40%	+/-1.9	25.20%	+/-2.0	4.50%	+/-1.6
75 years and over	20,591	+/-861	6.80%	+/-0.9	6.60%	+/-0.9	2.30%	+/-2.2

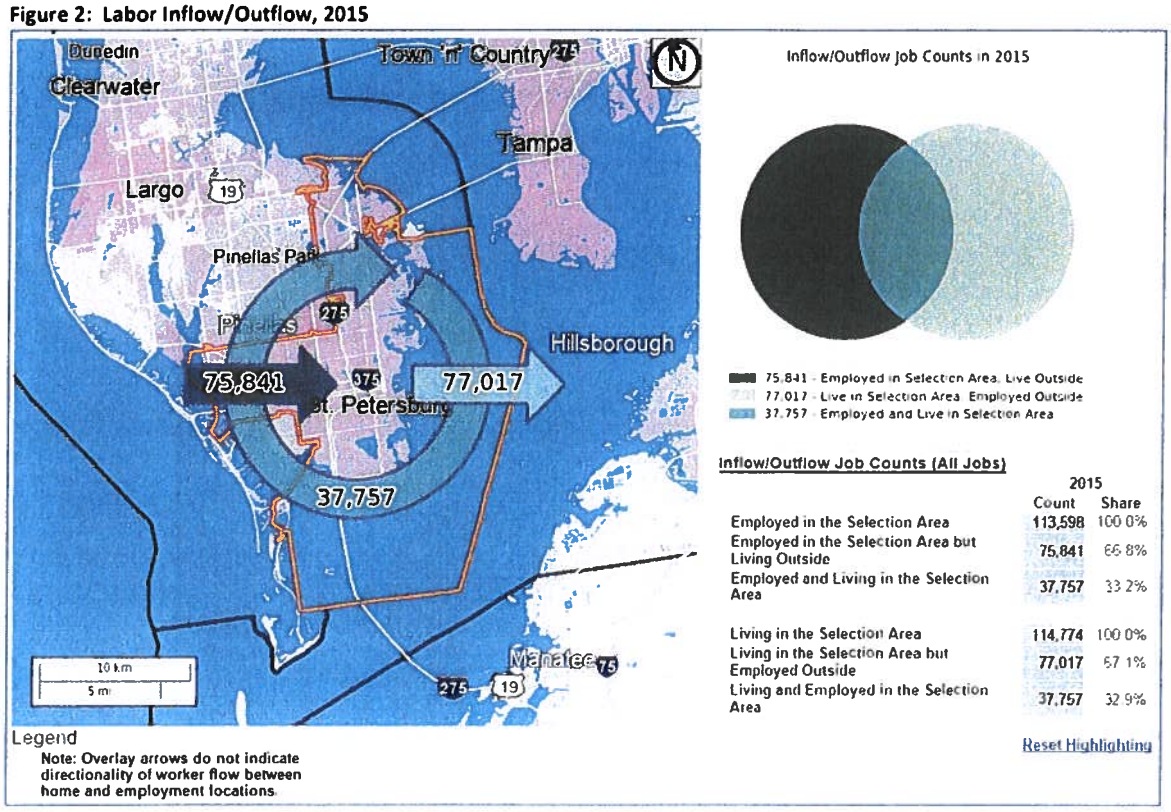
Source: U.S. Census American Community Survey (2013-2017), 2019

Labor Dynamics[16]

Based on Census data, the City of St. Petersburg had 113,598 jobs located within its boundaries. Of that number, 37,757 jobs (33.2%) were held by City residents. The other 75,841 workers resided outside of the city (66.8%) as shown in Figure 2. Slightly more than 67 percent of City residents leave the City every day to work.

[16] This is the latest Labor Dynamics available from the US Census

Figure 2: Labor Inflow/Outflow, 2015



ESRI 2018-2023 Socio Economic Estimates/Projections

ESRI estimated that the City had a population of 260,094 in 2018[17] and projected a 2023 population of 271,211, a net gain of 11,117 full time residents. ESRI estimated that the City had a daytime population of 265,931 comprised of 136,334 workers and 129,597 residents.

ESRI EMPLOYMENT/BUSINESSES

As shown below, the Retail sector is the largest job generator (17.9%) in the City followed by Health care/Social services (15.0%), Utilities (13.0%), Transportation/Warehousing (11.0), Finance/Insurance (10.8%), and Professional services (7.0%).

[17] Approximately 0.019% lower than latest Census estimates

Table 10: St. Petersburg Businesses and Employment

by NAICS Codes	Businesses Number	Businesses Percent	Employees Number	Employees Percent
Agriculture, Forestry, Fishing & Hunting	6	0.1%	38	0.0%
Mining	9	0.1%	58	0.0%
Utilities	6	0.1%	1,667	1.3%
Construction	460	5.0%	2,669	2.0%
Manufacturing	232	2.5%	5,975	4.5%
Wholesale Trade	174	1.9%	3,708	2.8%
Retail Trade	1,172	12.8%	23,727	17.9%
Motor Vehicle & Parts Dealers	132	1.4%	1,319	1.0%
Furniture & Home Furnishings Stores	77	0.8%	405	0.3%
Electronics & Appliance Stores	58	0.6%	1,271	1.0%
Bldg Material & Garden Equipment & Supplies Dealers	73	0.8%	1,160	0.9%
Food & Beverage Stores	152	1.7%	2,251	1.7%
Health & Personal Care Stores	145	1.6%	1,461	1.1%
Gasoline Stations	44	0.5%	184	0.1%
Clothing & Clothing Accessories Stores	158	1.7%	1,081	0.8%
Sport Goods, Hobby, Book, & Music Stores	69	0.8%	414	0.3%
General Merchandise Stores	59	0.6%	1,936	1.5%
Miscellaneous Store Retailers	191	2.1%	1,218	0.9%
Nonstore Retailers	14	0.2%	11,027	8.3%
Transportation & Warehousing	113	1.2%	1,438	1.1%
Information	193	2.1%	6,201	4.7%
Finance & Insurance	612	6.7%	14,325	10.8%
Central Bank/Credit Intermediation & Related Activities	184	2.0%	2,812	2.1%
Securities, Commodity Contracts & Other Financial	156	1.7%	6,778	5.1%
Insurance Carriers & Related Activities; Funds, Trusts	272	3.0%	4,735	3.6%
Real Estate, Rental & Leasing	553	6.0%	3,317	2.5%
Professional, Scientific & Tech Services	1,111	12.1%	9,329	7.0%
Legal Services	414	4.5%	2,295	1.7%
Management of Companies & Enterprises	21	0.2%	208	0.2%
Administrative & Support & Waste Management &	353	3.8%	2,264	1.7%
Educational Services	202	2.2%	7,422	5.6%
Health Care & Social Assistance	1,011	11.0%	19,896	15.0%
Arts, Entertainment & Recreation	220	2.4%	2,743	2.1%
Accommodation & Food Services	626	6.8%	10,719	8.1%
Accommodation	82	0.9%	1,980	1.5%
Food Services & Drinking Places	544	5.9%	8,739	6.6%
Other Services (except Public Administration)	1,173	12.8%	7,981	6.0%
Automotive Repair & Maintenance	139	1.5%	875	0.7%
Public Administration	181	2.0%	6,382	4.8%
Unclassified Establishments	762	8.3%	2,855	2.1%
Total	**9,190**	**100.0%**	**132,922**	**100.0%**

Source: Copyright 2018 Infogroup, Inc. All rights reserved. Esri Total Residential Population forecasts for 2018.

HOUSING CHARACTERISTICS

The number of housing units in the City, as reported by the American Community Survey 2013-2017[18], was estimated to be 131,356 units in 2017. Approximately 18 percent of the City's housing inventory is vacant; most of which are held for seasonal use. Table 8 summarizes housing occupancy in St. Petersburg for 2017.

[18] The 2013-2017 ACS data was released in December 2018 and is the latest data available.

Table 11: Housing Occupancy

Subject	St. Petersburg city, Florida			
HOUSING OCCUPANCY	Estimate	Margin of Error	Percent	Percent Margin of Error
Total housing units	131,356	+/-1,353	131,356	(X)
Occupied housing units	107,277	+/-1,246	81.70%	+/-0.7
Vacant housing units	24,079	+/-998	18.30%	+/-0.7
Homeowner vacancy rate	2.4	+/-0.5	(X)	(X)
Rental vacancy rate	8.4	+/-1.2	(X)	(X)

Source: U.S. Census American Community Survey (5 year 2013-2017), 2019

It is estimated that 56 percent of the total housing units in the City were single family detached units and 2.4 percent were single family attached. Multi-family housing of two to four units accounted for 7.4 percent of the total units and multi-family housing of 20 units or more accounted for nearly 17 percent of the housing stock. The City is estimated to contain 3.2 percent mobile homes.

Table 12: Housing Occupancy, 2017

Subject	St. Petersburg city, Florida			
HOUSING OCCUPANCY	Estimate	Margin of Error	Percent	Percent Margin of Error
UNITS IN STRUCTURE				
Total housing units	131,356	+/-1,353	131,356	(X)
1-unit, detached	73,887	+/-1,147	56.20%	+/-0.7
1-unit, attached	3,178	+/-289	2.40%	+/-0.2
2 units	3,980	+/-481	3.00%	+/-0.4
3 or 4 units	5,828	+/-461	4.40%	+/-0.3
5 to 9 units	7,573	+/-615	5.80%	+/-0.5
10 to 19 units	10,586	+/-732	8.10%	+/-0.6
20 or more units	21,923	+/-846	16.70%	+/-0.6
Mobile home	4,170	+/-393	3.20%	+/-0.3
Boat, RV, van, etc.	231	+/-140	0.20%	+/-0.1

Source: U.S. Census American Community Survey (5 year 2013-2017), 2019

AGE OF HOUSING STOCK

Based on Census data, approximately 76 percent of the City's housing stock is now approaching 40 years of age and not built to current standards (utilities, insulation, etc.).

Table 13: Housing by Age

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING OCCUPANCY				
YEAR STRUCTURE BUILT				
Total housing units	131,356	+/-1,353	131,356	(X)
Built 2014 or later	1,049	+/-205	0.80%	+/-0.2
Built 2010 to 2013	1,315	+/-210	1.00%	+/-0.2
Built 2000 to 2009	8,254	+/-558	6.30%	+/-0.4
Built 1990 to 1999	8,129	+/-582	6.20%	+/-0.4
Built 1980 to 1989	13,269	+/-801	10.10%	+/-0.6
Built 1970 to 1979	26,568	+/-987	20.20%	+/-0.8
Built 1960 to 1969	23,496	+/-933	17.90%	+/-0.6
Built 1950 to 1959	29,294	+/-873	22.30%	+/-0.6
Built 1940 to 1949	6,712	+/-593	5.10%	+/-0.4
Built 1939 or earlier	13,270	+/-575	10.10%	+/-0.4

Source: U.S. Census American Community Survey (2013-2017), 2019

Number of Bedrooms

The majority of residential units within the City have two or less bedrooms (61.7%). Two and three bedroom configurations account for approximately 71 percent of the City's housing stock.

Table 14: Number of Bedrooms

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING OCCUPANCY				
BEDROOMS				
Total housing units	131,356	+/-1,353	131,356	(X)
No bedroom	5,338	+/-520	4.10%	+/-0.4
1 bedroom	21,356	+/-1,087	16.30%	+/-0.8
2 bedrooms	54,251	+/-1,274	41.30%	+/-0.9
3 bedrooms	38,811	+/-1,089	29.50%	+/-0.8
4 bedrooms	10,125	+/-644	7.70%	+/-0.5
5 or more bedrooms	1,475	+/-223	1.10%	+/-0.2

Source: U.S. Census American Community Survey (2013-2017), 2019

Household by Tenure

Approximately 58 percent of the City's occupied housing is owner occupied (62,296 units) and 42 percent is renter occupied (44,981). The average household size for owner occupied homes was 2.38 and was 2.26 for renters.

Table 15: Household Tenure, 2017

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING TENURE				
Occupied housing units	107,277	+/-1,246	107,277	(X)
Owner-occupied	62,296	+/-1,268	58.10%	+/-0.9
Renter-occupied	44,981	+/-1,019	41.90%	+/-0.9
Average household size of owner-occupied	2.38	+/-0.04	(X)	(X)
Average household size of renter-occupied	2.26	+/-0.05	(X)	(X)

Source: U.S. Census American Community Survey (5-year 2013-2017), 2019

HOUSING VALUES

The ACS 2017 reports that the City's median value of owner occupied units was $165,000. This modest value largely reflects the large amount of older housing in the City. It should be noted that these values are what homeowners assumed their homes were valued at, as opposed to what actual sales were in 2017.

Table 16: Owner Occupied Housing Values, 2017

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING VALUE				
Owner-occupied units	62,296	+/-1,268	62,296	(X)
Less than $50,000	5,532	+/-534	8.90%	+/-0.9
$50,000 to $99,999	10,720	+/-682	17.20%	+/-1.0
$100,000 to $149,999	10,975	+/-711	17.60%	+/-1.1
$150,000 to $199,999	10,506	+/-678	16.90%	+/-1.0
$200,000 to $299,999	10,968	+/-628	17.60%	+/-1.0
$300,000 to $499,999	8,077	+/-446	13.00%	+/-0.7
$500,000 to $999,999	4,124	+/-334	6.60%	+/-0.5
$1,000,000 or more	1,394	+/-214	2.20%	+/-0.3
Median (dollars)	**$165,000**	**+/-2,453**	(X)	(X)

Source: U.S. Census American Community Survey (2013-2017), 2019

Family households comprise 53 percent of City's households, while 47 percent are nonfamily households. Married couples account for 35.5 percent of the City's households[19].

Table 17: Households by Type, 2017

HOUSEHOLD TYPE (INCLUDING LIVING ALONE) AND AGE OF	Occupied housing units		Percent occupied		Owner-occupied housing		Percent owner-occupied		Renter-occupied housing		Percent renter-occupied	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Family households	57,253	+/-1,154	53.40%	+/-1.0	38,273	+/-1,059	61.40%	+/-1.2	18,980	+/-873	42.20%	+/-1.6
Married-couple family	38,114	+/-1,065	35.50%	+/-1.0	29,649	+/-940	47.60%	+/-1.2	8,465	+/-649	18.80%	+/-1.4
Householder 15 to 34 years	4,391	+/-429	4.10%	+/-0.4	2,119	+/-296	3.40%	+/-0.5	2,272	+/-353	5.10%	+/-0.7
Householder 35 to 64 years	23,644	+/-866	22.00%	+/-0.8	18,462	+/-783	29.60%	+/-1.0	5,182	+/-482	11.50%	+/-1.1
Householder 65 years and over	10,079	+/-460	9.40%	+/-0.4	9,068	+/-406	14.60%	+/-0.7	1,011	+/-232	2.20%	+/-0.5
Other family	19,139	+/-864	17.80%	+/-0.8	8,624	+/-543	13.80%	+/-0.8	10,515	+/-727	23.40%	+/-1.5
Male householder, no wife present	4,699	+/-468	4.40%	+/-0.4	2,328	+/-310	3.70%	+/-0.5	2,371	+/-376	5.30%	+/-0.8
Householder 15 to 34 years	989	+/-244	0.90%	+/-0.2	332	+/-148	0.50%	+/-0.2	657	+/-173	1.50%	+/-0.4
Householder 35 to 64 years	2,991	+/-378	2.80%	+/-0.4	1,561	+/-256	2.50%	+/-0.4	1,430	+/-274	3.20%	+/-0.6
Householder 65 years and over	719	+/-231	0.70%	+/-0.2	435	+/-136	0.70%	+/-0.2	284	+/-155	0.60%	+/-0.3
Female householder, no husband	14,440	+/-749	13.50%	+/-0.7	6,296	+/-530	10.10%	+/-0.8	8,144	+/-589	18.10%	+/-1.2
Householder 15 to 34 years	3,167	+/-396	3.00%	+/-0.4	326	+/-111	0.50%	+/-0.2	2,841	+/-348	6.30%	+/-0.8
Householder 35 to 64 years	8,770	+/-681	8.20%	+/-0.6	3,873	+/-471	6.20%	+/-0.7	4,897	+/-524	10.90%	+/-1.1
Householder 65 years and over	2,503	+/-303	2.30%	+/-0.3	2,097	+/-284	3.40%	+/-0.5	406	+/-131	0.90%	+/-0.3
Nonfamily households	50,024	+/-1,310	46.60%	+/-1.0	24,023	+/-945	38.60%	+/-1.2	26,001	+/-855	57.80%	+/-1.6
Householder living alone	40,662	+/-1,245	37.90%	+/-1.0	20,005	+/-880	32.10%	+/-1.2	20,657	+/-789	45.90%	+/-1.6
Householder 15 to 34 years	6,744	+/-563	6.30%	+/-0.5	1,047	+/-182	1.70%	+/-0.3	5,697	+/-524	12.70%	+/-1.1
Householder 35 to 64 years	19,647	+/-959	18.30%	+/-0.8	9,394	+/-625	15.10%	+/-0.9	10,253	+/-620	22.80%	+/-1.4
Householder 65 years and over	14,271	+/-781	13.30%	+/-0.7	9,564	+/-622	15.40%	+/-0.9	4,707	+/-387	10.50%	+/-0.9
Householder not living alone	9,362	+/-594	8.70%	+/-0.6	4,018	+/-400	6.40%	+/-0.6	5,344	+/-461	11.90%	+/-1.0
Householder 15 to 34 years	3,633	+/-311	3.40%	+/-0.3	643	+/-153	1.00%	+/-0.2	2,990	+/-308	6.60%	+/-0.7
Householder 35 to 64 years	4,599	+/-397	4.30%	+/-0.4	2,467	+/-297	4.00%	+/-0.5	2,132	+/-304	4.70%	+/-0.7
Householder 65 years and over	1,130	+/-186	1.10%	+/-0.2	908	+/-160	1.50%	+/-0.3	222	+/-106	0.50%	+/-0.2

Source: U.S. Census American Community Survey (2013-2017), 2019

[19] American Community Survey (2013-2017), 2019

HOUSEHOLD INCOME

St. Petersburg's median occupied household income was estimated at $50,622 in 2017[20]. Owner occupied household median income was $62,889 and renter occupied median household income was $36,743.

Table 18: Median Household Income, 2017

Subject	St. Petersburg city, Florida											
	Occupied housing units		Percent occupied housing units		Owner-occupied housing units		Percent owner-occupied housing units		Renter-occupied housing units		Percent renter-occupied housing units	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Occupied housing units	107,277	+/-1,246	107,277	+/-1,246	62,296	+/-1,268	62,296	+/-1,268	44,981	+/-1,019	44,981	+/-1,019
HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-ADJUSTED DOLLARS)												
Less than $5,000	4,763	+/-530	4.40%	+/-0.5	1,530	+/-218	2.50%	+/-0.3	3,233	+/-478	7.20%	+/-1.0
$5,000 to $9,999	3,707	+/-405	3.50%	+/-0.4	1,239	+/-233	2.00%	+/-0.4	2,468	+/-300	5.50%	+/-0.6
$10,000 to $14,999	5,875	+/-570	5.50%	+/-0.5	2,727	+/-369	4.40%	+/-0.6	3,148	+/-474	7.00%	+/-1.0
$15,000 to $19,999	6,220	+/-594	5.80%	+/-0.5	2,790	+/-381	4.50%	+/-0.6	3,430	+/-420	7.60%	+/-0.9
$20,000 to $24,999	5,829	+/-462	5.40%	+/-0.4	2,545	+/-285	4.10%	+/-0.4	3,284	+/-365	7.30%	+/-0.9
$25,000 to $34,999	11,120	+/-630	10.40%	+/-0.6	5,459	+/-453	8.80%	+/-0.7	5,661	+/-425	12.60%	+/-0.9
$35,000 to $49,999	15,389	+/-827	14.30%	+/-0.7	8,121	+/-490	13.00%	+/-0.7	7,268	+/-662	16.20%	+/-1.4
$50,000 to $74,999	19,456	+/-960	18.10%	+/-0.9	11,595	+/-644	18.60%	+/-0.9	7,861	+/-669	17.50%	+/-1.5
$75,000 to $99,999	13,116	+/-659	12.20%	+/-0.6	9,251	+/-492	14.90%	+/-0.8	3,865	+/-473	8.60%	+/-1.0
$100,000 to $149,999	12,803	+/-688	11.90%	+/-0.6	9,301	+/-642	14.90%	+/-0.9	3,502	+/-437	7.80%	+/-1.0
$150,000 or more	8,999	+/-574	8.40%	+/-0.5	7,738	+/-509	12.40%	+/-0.8	1,261	+/-231	2.80%	+/-0.5
Median household income (dollars)	**$50,622**	**+/-897**	**$50,622**	**+/-897**	**$62,889**	**+/-1,767**	**$62,889**	**+/-1,767**	**$36,743**	**+/-873**	**$36,743**	**+/-873**

Source: U.S. Census American Community Survey (2013-2017), 2019

The median monthly household housing cost was $1,010. There was not a significantly difference between owner occupied median housing costs ($1,010) and renter occupied housing costs ($1,015).

Table 19: Monthly Housing Costs, 2017

Subject	St. Petersburg city, Florida											
	Occupied housing units		Percent occupied housing units		Owner-occupied housing units		Percent owner-occupied housing units		Renter-occupied housing units		Percent renter-occupied housing units	
MONTHLY HOUSING COSTS	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Less than $300	6,528	+/-479	6.10%	+/-0.4	5,480	+/-451	8.80%	+/-0.7	1,048	+/-173	2.30%	+/-0.4
$300 to $499	9,869	+/-545	9.20%	+/-0.5	8,452	+/-446	13.60%	+/-0.7	1,417	+/-282	3.20%	+/-0.6
$500 to $799	19,632	+/-892	18.30%	+/-0.8	10,369	+/-572	16.60%	+/-0.8	9,263	+/-654	20.60%	+/-1.3
$800 to $999	15,797	+/-816	14.70%	+/-0.7	6,677	+/-533	10.70%	+/-0.8	9,120	+/-592	20.30%	+/-1.3
$1,000 to $1,499	29,806	+/-873	27.80%	+/-0.8	14,166	+/-720	22.70%	+/-1.0	15,640	+/-754	34.80%	+/-1.6
$1,500 to $1,999	13,157	+/-834	12.30%	+/-0.8	8,529	+/-627	13.70%	+/-0.9	4,628	+/-470	10.30%	+/-1.0
$2,000 to $2,499	4,827	+/-385	4.50%	+/-0.4	3,718	+/-321	6.00%	+/-0.5	1,109	+/-246	2.50%	+/-0.5
$2,500 to $2,999	2,216	+/-232	2.10%	+/-0.2	1,936	+/-211	3.10%	+/-0.3	280	+/-105	0.60%	+/-0.2
$3,000 or more	3,308	+/-372	3.10%	+/-0.3	2,969	+/-323	4.80%	+/-0.5	339	+/-120	0.80%	+/-0.3
No cash rent	2,137	+/-327	2.00%	+/-0.3	(X)	(X)	(X)	(X)	2,137	+/-327	4.80%	+/-0.7
Median (dollars)	**$1,010**	**+/-14**	**$1,010**	**+/-14**	**$1,005**	**+/-22**	**$1,005**	**+/-22**	**$1,015**	**+/-17**	**$1,015**	**+/-17**

Source: U.S. Census American Community Survey (5-year 2013-2017), 2019

HOUSING AFFORDABILITY

The U.S. Department of Housing and Urban Development (HUD) defines affordability as housing costs of 30 percent or less of total monthly household income including utilities. Based on the 2017 ACS estimates, 34.2 percent of homeowners in the City "with a mortgage" paid 30 percent or more of their income on housing of which 26.5 percent paid over 35 percent or more.

[20] 2017 American Community Survey

Table 20: Owner Affordability

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	37,268	+/-996	37,268	(X)
Less than 20.0 percent	14,795	+/-677	39.70%	+/-1.7
20.0 to 24.9 percent	5,517	+/-454	14.80%	+/-1.1
25.0 to 29.9 percent	4,211	+/-433	11.30%	+/-1.1
30.0 to 34.9 percent	2,882	+/-338	7.70%	+/-0.9
35.0 percent or more	9,863	+/-630	26.50%	+/-1.3

Source: U.S. Census American Community Survey (5 year 2013-2017), 2019

For renters, the median monthly housing rent was reported to be $1,015.

Table 21: Gross Rents

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
GROSS RENT				
Occupied units paying rent	42,844	+/-963	42,844	(X)
Less than $500	2,465	+/-310	5.80%	+/-0.7
$500 to $999	18,383	+/-852	42.90%	+/-1.6
$1,000 to $1,499	15,640	+/-754	36.50%	+/-1.7
$1,500 to $1,999	4,628	+/-470	10.80%	+/-1.1
$2,000 to $2,499	1,109	+/-246	2.60%	+/-0.6
$2,500 to $2,999	280	+/-105	0.70%	+/-0.2
$3,000 or more	339	+/-120	0.80%	+/-0.3
Median (dollars)	**$1,015**	**+/-17**	**(X)**	**(X)**

Source: U.S. Census American Community Survey (5 year 2013-2017), 2019

Slightly over 52 percent of renters in the City paid 30 percent or more of their income on housing while 43.4 percent paid 35 percent or more for rent, clearly indicating an affordability problem.

Table 22: Renter Affordability

Subject	St. Petersburg city, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	41,450	+/-958	41,450	(X)
Less than 15.0 percent	4,351	+/-485	10.50%	+/-1.1
15.0 to 19.9 percent	5,199	+/-481	12.50%	+/-1.2
20.0 to 24.9 percent	5,423	+/-522	13.10%	+/-1.2
25.0 to 29.9 percent	4,839	+/-550	11.70%	+/-1.3
30.0 to 34.9 percent	3,646	+/-465	8.80%	+/-1.1
35.0 percent or more	17,992	+/-836	43.40%	+/-1.8
Not computed	3,531	+/-478	(X)	(X)

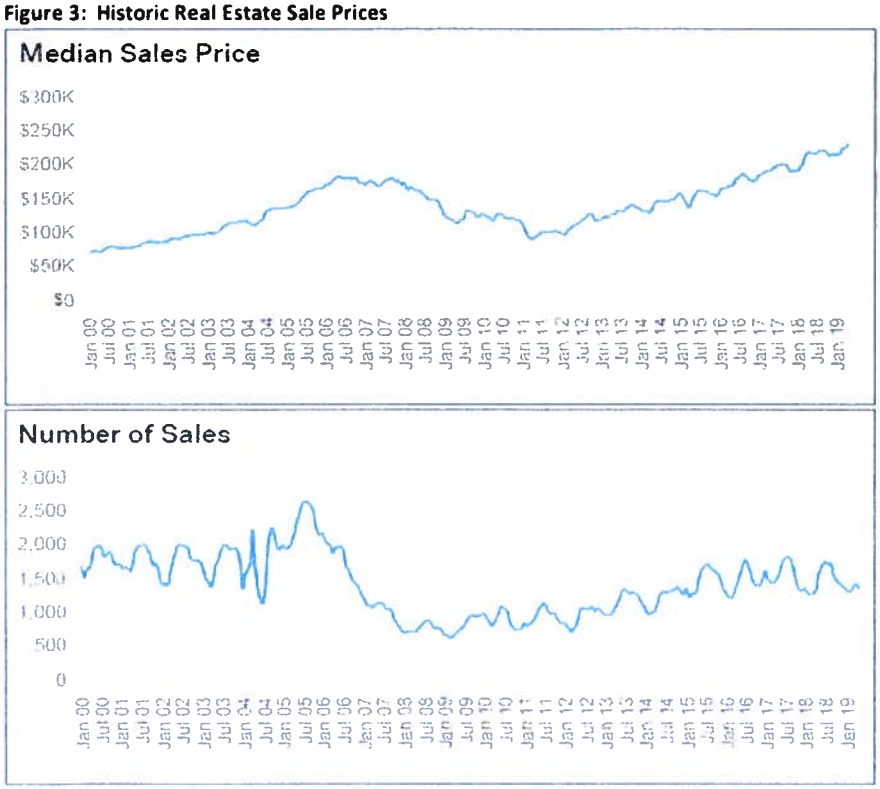
Source: U.S. Census American Community Survey (5 year 2013-2017), 2019

CHAPTER 3: HOUSING SUPPLY

ST. PETERSBURG HOUSING METRICS

St. Petersburg real estate market has fully recovered from the "great recession" with housing prices exceeding the peak 2006 housing boom, although the number of sales is still 50 percent of the City's high during 2006.

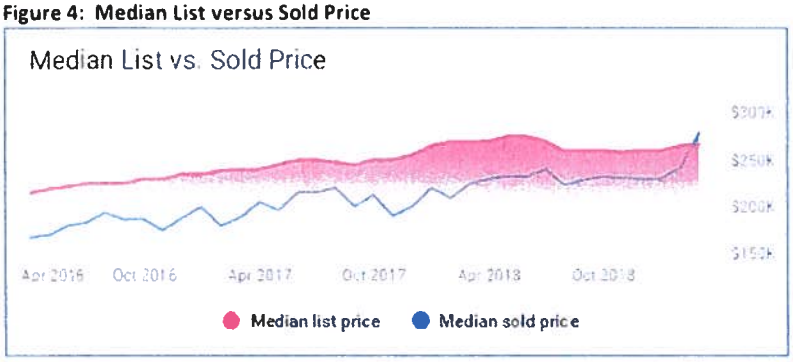
Figure 3: Historic Real Estate Sale Prices



Source: Trulia.com, 2019

Based on an analysis of Realtor.com data, St. Petersburg has a very active and balanced residential market. As of the end of May 2019, there are 3,755 homes for sale in St. Petersburg, 242 of which were newly listed. Additionally, there are 736 rentals, with a range of $675 to $15K per month.

Figure 4: Median List versus Sold Price



Source: Trulia.com, 2019

Homes for sale in the City have a median listing price of $266,500 and a price per square foot of $206 as of May 2019[21]. There are 3,755 active homes for sale in the City which spend an average of 74 days on the market, as of December, 2018[22].

Figure 5: Home Values, 2019

$266.5K	$206	$279K
Median Listing Home Price	Median Listing Home Price/Sq Ft	Median Sold Home Price

Source: Realtor.com

2019 MLS Housing Data

Strategic Planning Group, Inc. also analyzed Multiple Listing Service (MLS) data as reported by the Pinellas Realtor Organization (part of Florida Realtors) to determine local market conditions.

Based on MLS data[23], median single family sales price as of February 2019 was $235,515, a 2.8 percent increase over 2018 (YoY). Townhouse and condominium sales price was $280,000, a 52.4 percent increase YoY.

Table 23: MLS Sales Metrics, 2014-2019

Median Sales Price						
	Combined		Single Family		Townhouse/Condo	
2014	$137,000		$139,000		$125,650	
2015	$148,000	8.0%	$150,700	8.4%	$126,000	0.3%
2016	$172,400	16.5%	$179,000	18.8%	$147,500	17.1%
2017	$195,000	13.1%	$200,000	11.7%	$175,000	18.6%
2018	$220,000	12.8%	$229,000	14.5%	$183,775	5.0%
2019 (Jan -Feb)	$249,188	13.3%	$235,515	2.8%	$280,000	52.4%

Source: Realtors of Pinellas, 2019

The City has averaged approximately 5,800 single family sales per year for the last two years, with the largest number of sales in the $200,000 - $249,999 range.

[21] Realtor.com, May 24, 2019

[21,23] MLS of the Pinellas Board of Realtors, 2019

Table 24: MLS Sales Metrics, 2017-2018

Close Sales Price - Single Family Homes	2014	2015	% Change	2016	% Change	2017	% Change	2018	% Change	2019 (Jan - Feb)
Less than $50,000	1,096	1,203	9.8%	969	-19.5%	818	-15.6%	823	0.6%	216
$50,000 - $99,999	687	866	26.1%	645	-25.5%	438	-32.1%	323	-26.3%	72
$100,000 - $149,999	693	1,120	61.6%	1,124	0.4%	817	-27.3%	550	-32.7%	122
$150,000 - $199,999	277	477	72.2%	637	33.5%	775	21.7%	833	7.5%	189
$200,000 - $249,999	443	820	85.1%	989	20.6%	1,139	15.2%	1,091	-4.2%	235
$250,000 - $299,999	161	307	90.7%	451	46.9%	486	7.8%	583	20.0%	135
$300,000 - $399,999	235	331	40.9%	468	41.4%	521	11.3%	650	24.8%	141
$400,000 - $599,999	198	342	72.7%	414	21.1%	419	1.2%	526	25.5%	130
$600,000 - $999,999	144	211	46.5%	246	16.6%	293	19.1%	315	7.5%	89
$1,000,000 or more	39	70	79.5%	90	28.6%	113	25.6%	142	25.7%	40
Total	3,973	5,747		6,033		5,819		5,836		1,369

Source: Realtors of Pinellas, 2019

St. Petersburg has had an active townhouse/condominium market over the last several years, averaging approximately 3,000 sales per year.

Table 25: MLS Sales Metrics, 2017-2018

Close Sales Price - Townhouse/Condos	2014	2015	% Change	2016	% Change	2017	% Change	2018	% Change	2019 (Jan - Feb)
Less than $50,000	945	1,202	27.2%	992	-17.5%	889	-10.4%	769	-13.5%	194
$50,000 - $99,999	286	438	53.1%	505	15.3%	548	8.5%	564	2.9%	126
$100,000 - $149,999	224	273	21.9%	278	1.8%	357	28.4%	335	-6.2%	82
$150,000 - $199,999	102	158	54.9%	195	23.4%	229	17.4%	205	-10.5%	47
$200,000 - $249,999	144	220	52.8%	229	4.1%	259	13.1%	272	5.0%	76
$250,000 - $299,999	89	136	52.8%	133	-2.2%	161	21.1%	162	0.6%	56
$300,000 - $399,999	110	235	113.6%	238	1.3%	286	20.2%	280	-2.1%	63
$400,000 - $599,999	89	114	28.1%	132	15.8%	239	81.1%	239	0.0%	60
$600,000 - $999,999	49	60	22.4%	67	11.7%	121	80.6%	145	19.8%	67
$1,000,000 or more	22	36	63.6%	32	-11.1%	63	96.9%	77	22.2%	66
Total	2,060	2,872		2,801		3,152		3,048		837

Source: Realtors of Pinellas, 2019

Rental Market

As reported by US Census Bureau's American Community Survey, renters of all types of housing in St. Petersburg have significantly lower household incomes than overall occupied households. In 2017 the median renter household income was $36,743 and inflated to 2019 is $38,463. According to HUD standards the median rental household can only afford to spend $962 a month for rent and utilities.

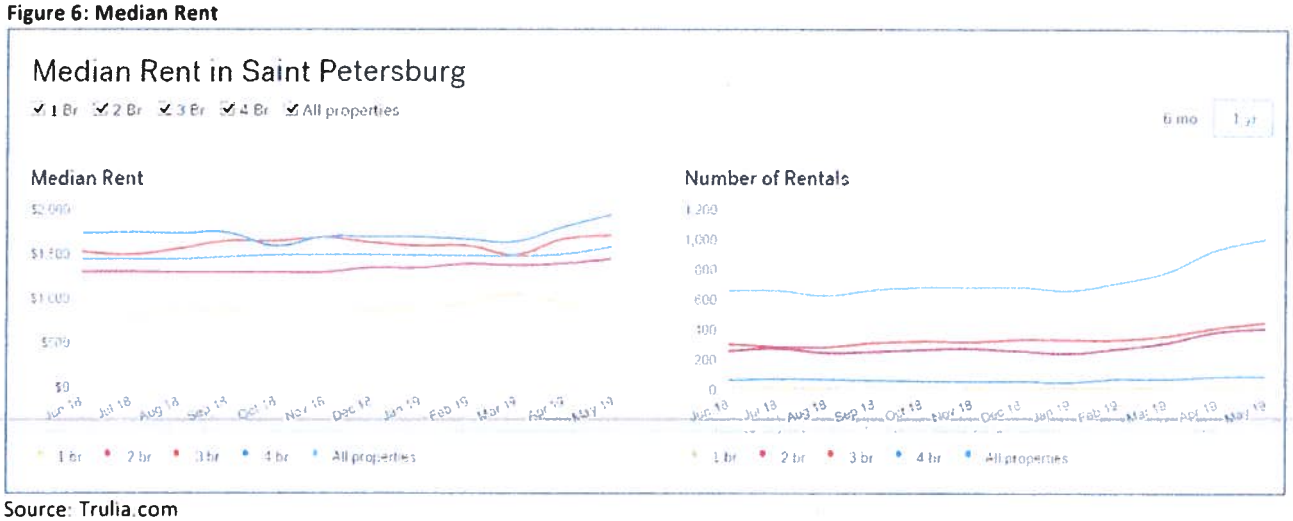
Table 26: St. Petersburg Rental Household Income

Subject	St. Petersburg city, Florida						
	Occupied housing units		Renter-occupied housing		Percent renter-occupied housing		
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Cumulative Estimate	Margin of Error
Occupied housing units	107,277	+/-1,246	44,981	+/-1,019	44,981		+/-1,019
HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2017 INFLATION-							
Less than $5,000	4,763	+/-530	3,233	+/-478	7.20%	7.20%	+/-1.0
$5,000 to $9,999	3,707	+/-405	2,468	+/-300	5.50%	12.70%	+/-0.6
$10,000 to $14,999	5,875	+/-570	3,148	+/-474	7.00%	19.70%	+/-1.0
$15,000 to $19,999	6,220	+/-594	3,430	+/-420	7.60%	27.30%	+/-0.9
$20,000 to $24,999	5,829	+/-462	3,284	+/-365	7.30%	34.60%	+/-0.9
$25,000 to $34,999	11,120	+/-630	5,661	+/-425	12.60%	47.20%	+/-0.9
$35,000 to $49,999	15,389	+/-827	7,268	+/-662	16.20%	63.40%	+/-1.4
$50,000 to $74,999	19,456	+/-960	7,861	+/-669	17.50%	80.90%	+/-1.5
$75,000 to $99,999	13,116	+/-659	3,865	+/-473	8.60%	89.50%	+/-1.0
$100,000 to $149,999	12,803	+/-688	3,502	+/-437	7.80%	97.30%	+/-1.0
$150,000 or more	8,999	+/-574	1,261	+/-231	2.80%	100.10%	+/-0.5
Median household income (dollars)	$50,622	+/-897	$36,743	+/-873	$36,743	$36,743	+/-873

Source: U.S. Census American Community Survey (5 year 2013-2017), 2019

Based on data from Trulia.com, St. Petersburg median rent as of May 2019 was $1,590 based on 1,005 rentals (single family and apartments).

Figure 6: Median Rent



Source: Trulia.com

Apartment Market

Strategic Planning Group, Inc. commissioned REIS for a competitive apartment analysis of the St. Petersburg market. Based on REIS 4th Quarter 2018 apartment data, the asking rent range from $814 to $2,785. Vacancy rates are directly related to rents and range from 0 to 21.6 percent.

Table 27: REIS Comparable Apartment Metrics, 2019

	LOW	MEAN	MEDIAN	HIGH
Current Asking Rent/Unit	$814	$1,668	$1,138	$2,785
Current Effective Rent/Unit	$725	$1,486	$1,014	$2,481
Current Vacancy Rate	0.0%	5.9%	2.3%	21.6%
Property Size (units)	43	211	175	477
Year Built	1945	1997	1976	2018
	STUDIO	**1BR**	**2BR**	**3BR**
Current Asking Rent/Unit	$1,222	$1,489	$1,987	$1,726
Current Effective Rent/Unit	$1,089	$1,326	$1,770	$1,537
Unit Size (SF)	528	724	1,051	1,178
Units	20	102	85	4
Current Asking Rent/SF	$2.30	$2.03	$1.85	$1.45

Source: Reis, Inc. 2019

Asking rents by bedroom type range from $1,222 to $1,987 and range in size form 528 sq. ft. to 1,178 sq. ft.

The following table compares recent comparative rent metrics for the St. Petersburg submarket. Data, for the final two quarters of 2018, show that the immediate area comparables have low vacancy rates and effective rent growth rates, which are higher than the overall region.

Table 28: Apartment Performance Metrics (Asking and Effective Rent Growth Rates)

	QUARTERLY			ANNUALIZED		
	4Q 2018	3Q 2018	YTD	1 YEAR	3 YEAR	5 YEAR
Comp Group	9.9%	2.0%	2.4%	10.0%	12.6%	12.5%
Central St. Pete	11.1%	2.8%	2.6%	11.0%	11.3%	9.1%
Tampa-St. Petersburg	1.4%	1.5%	1.3%	5.4%	5.1%	4.6%

EFFECTIVE RENT GROWTH RATES

	QUARTERLY			ANNUALIZED		
	4Q 2018	3Q 2018	YTD	1 YEAR	3 YEAR	5 YEAR
Comp Group	23.4%†	2.3%	5.6%	24.3%†	23.4%†	22.3%†
Central St. Pete	9.7%	3.1%	2.5%	10.2%	10.0%	7.2%
Tampa-St. Petersburg	1.3%	1.5%	1.3%	5.3%	4.7%	4.5%

†Historical trends include only properties in the Comp Group that have at least five full years of history; aggregated data on rents and vacancies displayed in other tables may therefore not match precisely.

Source: Reis, Inc. 2019

Since 2017, the overall rental market has been stable, with an asking rent of approximately $1,660 per unit and a declining vacancy rate of 5.9 percent at the end of April 2019.

Table 29: Apartment Performance Metrics (Asking and Effective Rent Growth Rates)

Year	Month/Qtr	Asking Rent (per Unit)	Asking Rent Pct Change	Vacancy Rate	Vacancy Change (BPS)
2017	4	$1,488	-1.1%	8.6%	-20
2018	1	$1,466	-1.5%	8.6%	0
2018	2	$1,461	-0.3%	8.1%	-50
2018	3	$1,490	2.0%	5.7%	-240
2018	4	$1,637	9.9%	6.7%	100
2019	Mar	$1,664	0.3%	6.1%	-20
2019	Apr	$1,668	0.3%	5.9%	-20

Historical trends include only properties in the Comp Group that have at least five full years of history; aggregated data on rents and vacancies displayed in other tables may therefore not match precisely

Source: Reis, Inc. 2019

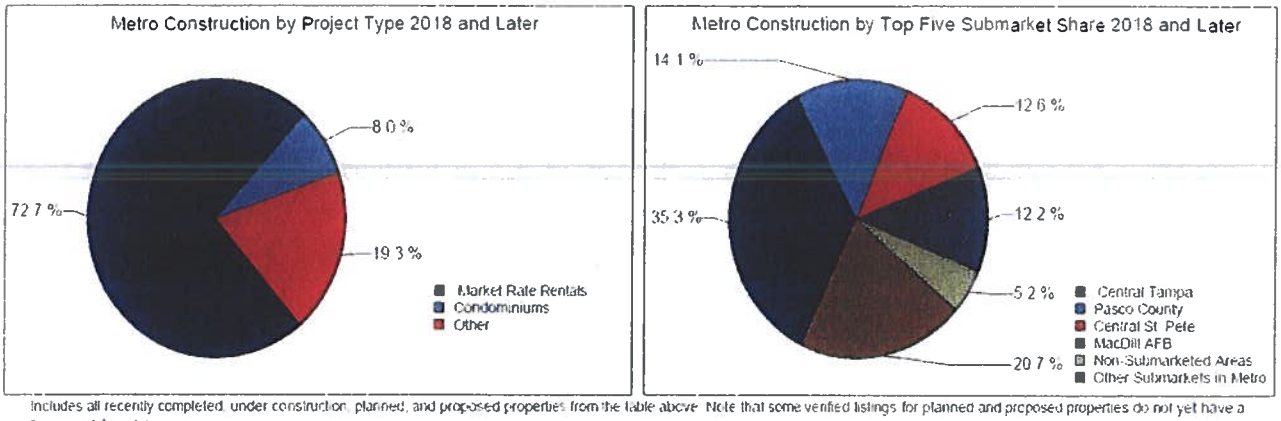
The City has several apartments/condominiums planned, based on Reis, Inc. data, as shown below:

Table 30: Completed and Planned Apartments

	Completed Units		Units Under Construction		Totals	Planned	Proposed	Totals
	2018	YTD 2019	2019	2020 and Later	2018 and Later			
Market Rate Rentals	4,816	1,050	3,566	2,198	11,630	8,284	4,095	12,379
Condominiums	285	0	0	119	404	2,142	90	2,232
Other	635	154	53	249	1,091	5,174	101	5,275
Totals	5,736	1,204	3,619	2,566	13,125	15,600	4,286	19,886

Source: Reis, Inc. 2019

Figure 7: Type of Rental Projects and Submarket Areas



Includes all recently completed, under construction, planned, and proposed properties from the table above. Note that some verified listings for planned and proposed properties do not yet have a firm completion date

Source: Reis, Inc. 2019

Based on REIS data, the City of St. Petersburg comprises two submarkets: Central St. Petersburg and North St. Petersburg. As shown below most of the apartment activity is found in Central St. Petersburg.

Table 31: Pinellas County Apartment Market

	1. Completed			2. Under Construction			3. Planned/Proposed			
Submarket	Apartment	Condo	Other	Apartment	Condo	Other	Apartment	Condo	Other	Grand Total
Pinellas Beaches	0	0	0	0	104	28	593	87	0	812
Central St Pete	1,016	253	0	578	0	103	2,200	20	0	4,170
North St Pete	0	0	130	0	0	0	198	0	0	328
Largo	258	0	92	0	0	0	0	0	224	574
Pinellas Park	241	0	6	274	0	0	112	0	0	633
Clearwater	0	0	0	339	0	0	177	0	0	516
North Pinellas	675	0	56	0	0	36	374	0	130	1,271
North Hillsborough	612	0	0	218	0	0	0	0	0	830
Westshore	182	0	0	323	0	0	322	0	0	827
Sulphur Springs	81	0	56	0	0	0	0	0	0	137
University South	38	0	0	0	0	0	114	0	0	152
Temple Terrace	0	0	24	0	0	24	0	0	0	48
Central Tampa	1,322	0	291	896	0	43	4,942	557	3,586	11,637
Brandon/Plant City	240	0	0	0	0	0	236	0	225	701
MacDill AFB	0	32	0	1,239	15	68	1,109	1,568	0	4,031
Pasco County	835	0	30	1,373	0	0	1,390	0	1,016	4,644
Non-Submarketed Areas	366	0	104	524	0	0	612	0	94	1,700

Source: Reis, Inc. 2019

RENT SUMMARY

The median asking rent for all rentals including single family homes as reported by Trulia ($1,590) would require a household income of $64,000; the latter of which is significantly higher than St. Petersburg's median household income of $57,700[24].

Using SPG's Affordability Model, a St. Petersburg "median household" could afford a monthly rent of $1,443 or a $229,400 home, assuming a 10 percent down payment and other debt of 12 percent as shown below.

Table 32: Median Household Rent/Owner Affordability, 2019

Affordability Calculator
Median Household Income 2019:

Downpayment	10%	**Utilities**	15%
Cost Burden	30%	**Tax & Ins**	20%
Interest Rate	4.25%	**Other Debt**	12%

Income Category	Median Income (%)	Household Income	Monthly Rent	Monthly Payment	Payment - Tax & Ins	Amt of Mortgage	Home Price
Very Low	50%	$28,850	$721	$635	$508	$103,216	$103,216
Very Low	60%	$34,620	$866	$762	$609	$123,859	$123,859
Low	80%	$46,160	$1,154	$1,016	$812	$165,145	$183,495
Median	100%	$57,700	$1,443	$1,269	$1,016	$206,432	$229,369
Moderate	120%	$69,240	$1,731	$1,523	$1,219	$247,718	$275,242

[24] Estimated by SPG using HUD methodology (2017 inflated by 4.68 percent based on BLS data)

CHAPTER 4: ST. PETERSBURG'S WORKFORCE/ATTAINABLE HOUSING NEEDS

WORKFORCE HOUSING NEEDS

One of the major issues in defining workforce housing is determining what income group or cohort to use within the analysis. As previously discussed workforce housing is usually defined as 81 percent to 120 percent or 140 percent AMI. The problem encountered is that HUD defines AMI in terms of "family income" which no longer represents the majority of households and which is usually considerably higher than the overall median household income for an area. Furthermore, most federal and state programs limit assistance to households at or below 80 percent median family income. By using HUD's AMI figure, which most, if not all communities do as required by HUD, the affordability issue is understated.
The other main issue in defining attainable and workforce housing is the difference in housing costs between ownership and rental households.

OWNERSHIP

HUD defines attainable as households paying 30 percent or less of their income on housing although; in recent years many lending institutions had increased this level to 40 percent as an acceptable cost burden. It is difficult to accurately define affordability for homeowners using this definition for a host of reasons. First, most homeowners tend to maximize their monthly payments (subject to financing) in order to buy the most they can afford. This is due to the fact that housing is perceived as a long term investment as well as a potential tax deduction. Mortgage originators tend to use the 28/36 rule when qualifying for a loan. Housing expenses should not exceed 28 percent (includes HOA, home insurance and property taxes) as well as not exceeding 36 percent of total gross income which includes housing expenses as well as credit cards and other debt.

Older households, especially those that have recently moved into the area, may perceive the local housing market as a bargain compared to other parts of the county. If they have sold their previous residence for a large profit, they tend to over invest by building or purchasing a larger home with more amenities than their previous residence. Some may even have the money to pay cash but choose to take out a mortgage.

The last major problem with ownership affordability is the definition of "income" verses wealth, which is partially addressed above. One major group, senior citizens (65 years and older) fall into this cohort. In many cases, the elderly have limited income (defined as living at or below the poverty line, see discussion below) yet have sizeable wealth. The relatively new use of reverse mortgages is an attempt to deal with part of this issue.

Finally, those that currently own housing have for the most part reached the "American Dream". A number of issues; demographics, ethnicity, tighter credit controls, future job changes, student debt, changing beliefs about housing being a good investment, etc. have a significant percentage of households seeking rental housing (both single family and apartments).

RENTER HOUSEHOLDS

Renter households are a good indicator of affordability. Historically, for most Americans, the ultimate "dream" was homeownership; therefore if all could "afford" and qualify for ownership, the rental market would be expected to be limited. Traditionally, the main reasons for rental housing were recent migration to the area, new household formation usually caused by separation or divorce, and new younger aged

households (couples or unrelated individuals). However, due to a host of financial reasons including high priced housing, many households cannot afford nor desire ownership. These factors include: lack of income, lack of credit, and/or insufficient down payment, or no longer see homeownership as a means of wealth creation.

Defining the Workforce Housing Gap

This section describes the methodology used to define the workforce housing needs within Pinellas County. This first component of SPG workforce housing methodology is the relationship between job growth and population growth in order to calculate household income by income range.

Relationship Between Job Growth And Population Growth

The social issue driving this analysis has been the growth in moderate income households. Growth in Pinellas County is driven by both new employment in and adjacent to the county and city as well as retirement. New job growth is based on the foundation of existing residents. Most non-retirement people coming to the area would not come if they could not expect to find employment. Those born in the local area would not stay without jobs. Simply stated, if a region of the country does not maintain job growth, there will be out migration to regions where job growth is occurring. While employment generation is important to the growth of Pinellas County and the City, the region is attractive to retirees and foreigners who buy and rent residential units.

Demand

The analysis is comprised of several steps used to convert new employment into households and income categories to determine gaps in housing affordability at different income levels.

A housing affordability calculation based upon HUD defined income categories ranging from low to moderate income was utilized to determine rent and mortgage/home prices supportable for each income category. Major assumptions in this calculation are a down payment of 10 to 20 percent, cost burden of 30 percent, taxes and insurance of 15 percent, utilities costs at 20 percent, and a mortgage interest rate of 4.25 percent. For the most part it also assumes no other debt.

Housing Affordability

Housing is primarily a function of the private market and is influenced by economic factors such as financial feasibility and profitability. Government has played an increasing role in housing in response to the failure of the private market to provide housing that is affordable to certain households. Affordable workforce housing is housing that does not financially cost burden a family and that is safe and in decent condition. Federal government guidelines, primarily those developed by the U.S. Department of Housing and Urban Development (HUD), define affordable housing as costing an owner or renter no more than 30% of the household's gross monthly income for housing costs, including utilities. The relationship between housing cost and income determines how affordable a community is to live in. If the housing prices are high and incomes are low, it is more likely that people will experience difficulty in affording housing and they are more likely to spend greater than 30% of their incomes on housing.

St. Petersburg is one of Pinellas County's moderately priced cities. As shown earlier, the City's median family income was estimated to be $75,582 in 2017, with median household income of $55,134 and non-family median income of $37,353.

Table 33: Median Income by Type of Household, 2017

Subject	St. Petersburg			
	Households	Families	Married-couple families	Nonfamily households
	Estimate	Estimate	Estimate	Estimate
Median income (dollars)	$55,134	$75,582	$85,853	$37,353
Mean income (dollars)	$80,310	$103,397	N	$54,117

Source: US Census American Community Survey 2013-2017, 2019

Using the City's median household income of $57,700[25], a St. Petersburg median income household can afford $1,269 for rent or a maximum of $229,400[26] for a single family home. The median MLS single family sale price was $235,515 in 2019 and $280,000[27] for a townhome/condominium; therefore a single family home is not affordable to a median income household, nor could it afford a median priced townhome/condominium nor the asking apartment rent for a two bedroom apartment, $1,987.

Table 34: Housing Affordability, 2019 (Median Household Income)

Affordability Calculator Median Household Income 2019:							
Downpayment	10%		Utilities	15%			
Cost Burden	30%		Tax & Ins	20%			
Interest Rate	4 25%		Other Debt	12%			
Income Category	Median Income (%)	Household Income	Monthly Rent	Monthly Payment	Payment - Tax & Ins	Amt of Mortgage	Home Price
Very Low	50%	$28,850	$721	$635	$508	$103,216	$103,216
Very Low	60%	$34,620	$866	$762	$609	$123,859	$123,859
Low	80%	$46,160	$1,154	$1,016	$812	$165,145	$183,495
Median	100%	$57,700	$1,443	$1,269	$1,016	$206,432	$229,369
Moderate	120%	$69,240	$1,731	$1,523	$1,219	$247,718	$275,242

Source: Strategic Planning Group, Inc., 2019

In analyzing affordability, it must be remembered that household income is not typically the same thing as a single wage income. Today, most households represent two or more wage earners.

Identifying Existing Occupations and Wages

During this step SPG collected data from the Florida Department of Labor, U.S. Department of Labor as well as the City on occupational employment and wages for St. Petersburg/Pinellas County. These jobs were then identified on a per capita basis in order to translate the type of occupations created by an increase in future population growth in the City. As shown below, 48 percent of the MSA's occupations have an entry wage of less than $12 per hour. Slightly over 25 percent have an entry salary of less than $10 per hour or an annual wage of less than $16,600.

[25] 2013-2017 ACS inflated by 1.0468 to obtain 2019 estimate
[26] MLS data for February 2019
[27] ibid

Table 35: County Wage Levels for Selected Occupations, 2018

Occupational Code	Title	2018 Employment	Hourly Wage (2018 wage estimates in dollars) Mean	Median	Entry**	Exp***
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	6,670	9.57	9.13	8.78	9.96
35-2011	Cooks, Fast Food	1,090	10.91	10.26	8.83	11.94
39-3031	Ushers, Lobby Attendants, and Ticket Takers	1,790	11.04	9.46	8.84	12.14
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	3,920	9.97	9.39	8.85	10.53
35-3011	Bartenders	8,450	10.91	9.26	8.86	11.93
35-3041	Food Servers, Nonrestaurant	2,390	9.74	9.25	8.87	10.18
53-3041	Taxi Drivers and Chauffeurs	1,270	11.08	10.55	8.87	12.18
35-3031	Waiters and Waitresses	28,020	12.46	9.39	8.88	14.24
39-9011	Childcare Workers	4,410	11.10	9.91	8.90	12.20
39-9099	Personal Care and Service Workers, All Other	800	11.83	10.29	8.90	13.29
41-9011	Demonstrators and Product Promoters	760	13.64	11.95	8.93	15.99
53-3031	Driver/Sales Workers	3,840	11.84	9.75	8.93	13.30
39-2021	Nonfarm Animal Caretakers	1,670	11.46	10.80	8.94	12.72
41-2011	Cashiers	32,680	10.53	10.06	8.97	11.31
53-6021	Parking Lot Attendants	2,510	10.32	9.54	8.97	11.00
39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,530	15.26	12.34	8.98	18.40
41-9041	Telemarketers	2,650	12.12	10.57	8.98	13.69
39-3091	Amusement and Recreation Attendants	4,400	10.10	9.44	9.00	10.65
53-7064	Packers and Packagers, Hand	4,750	10.72	9.87	9.00	11.58
51-9199	Production Workers, All Other	1,530	12.85	11.62	9.02	14.76
41-2031	Retail Salespersons	42,550	12.90	11.14	9.03	14.83
35-9021	Dishwashers	5,560	10.56	10.27	9.11	11.28
39-9021	Personal Care Aides	5,980	10.86	10.25	9.13	11.72
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	1,130	11.68	11.02	9.13	12.96
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	4,400	11.85	10.90	9.16	13.19
41-2022	Parts Salespersons	2,710	13.39	11.95	9.33	15.42
51-6011	Laundry and Dry-Cleaning Workers	2,100	10.97	10.72	9.39	11.76
37-2012	Maids and Housekeeping Cleaners	9,070	11.30	10.77	9.44	12.22
41-2021	Counter and Rental Clerks	4,050	13.38	11.66	9.45	15.35
35-2015	Cooks, Short Order	1,410	14.88	12.83	9.49	17.58
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	1,110	13.09	12.21	9.56	14.86
35-2021	Food Preparation Workers	7,010	11.64	11.21	9.66	12.63
33-9032	Security Guards	11,400	14.81	11.60	9.66	17.38
51-3011	Bakers	1,020	14.25	13.21	9.80	16.48
53-3033	Light Truck or Delivery Services Drivers	7,200	16.80	14.52	9.80	20.30
51-9111	Packaging and Filling Machine Operators and Tenders	3,970	13.01	12.12	9.80	14.61
51-2028	Electrical, electronic, and electromechanical assemblers, except coil winders, tapers, and finishers	2,500	15.25	14.16	9.81	17.97
25-2011	Preschool Teachers, Except Special Education	3,980	12.44	11.98	9.95	13.68
31-1011	Home Health Aides	3,860	11.20	10.96	10.00	11.80
39-9032	Recreation Workers	3,110	13.60	11.94	10.01	15.40
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	16,170	13.95	11.80	10.03	15.91
43-5081	Stock Clerks and Order Fillers	19,710	12.68	11.74	10.04	13.99
27-1026	Merchandise Displayers and Window Trimmers	1,470	15.96	13.69	10.05	18.92
43-9061	Office Clerks, General	27,580	16.00	14.39	10.08	18.96
43-4081	Hotel, Motel, and Resort Desk Clerks	1,830	11.64	11.25	10.12	12.40
51-2098	Assemblers and fabricators, all other, including team assemblers	9,050	14.34	13.64	10.15	16.43
51-9198	Helpers--Production Workers	1,580	13.65	13.26	10.15	15.40
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	16,620	13.74	12.55	10.25	15.48
43-4111	Interviewers, Except Eligibility and Loan	2,700	16.47	16.00	10.29	19.56
43-4171	Receptionists and Information Clerks	12,900	13.53	13.10	10.30	15.15
43-9021	Data Entry Keyers	2,440	15.08	14.10	10.32	17.46
37-3011	Landscaping and Groundskeeping Workers	8,850	13.33	12.68	10.37	14.82
35-2014	Cooks, Restaurant	12,750	12.62	12.41	10.45	13.71
41-9099	Sales and Related Workers, All Other	1,120	18.35	14.29	10.45	22.30
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	1,950	18.14	14.85	10.49	21.97
53-3022	Bus Drivers, School or Special Client	3,110	13.78	13.56	10.52	15.41
35-2012	Cooks, Institution and Cafeteria	1,980	13.07	12.89	10.55	14.34
25-3021	Self-Enrichment Education Teachers	4,810	21.53	17.01	10.58	27.00
51-6031	Sewing Machine Operators	1,000	13.44	12.90	10.58	14.87
47-2051	Cement Masons and Concrete Finishers	2,130	16.48	16.53	10.61	19.42
47-2061	Construction Laborers	9,110	14.58	13.99	10.63	16.55
37-2021	Pest Control Workers	1,890	17.71	18.17	10.71	21.20
31-9011	Massage Therapists	1,440	20.86	17.41	10.91	25.83
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,130	18.56	15.15	10.96	22.36
47-2181	Roofers	3,390	15.89	16.20	11.01	18.33
43-5071	Shipping, Receiving, and Traffic Clerks	4,640	15.63	14.45	11.09	17.89
31-1014	Nursing Assistants	14,740	13.41	13.16	11.13	14.55
43-4071	File Clerks	1,620	15.28	15.04	11.28	17.28
29-2052	Pharmacy Technicians	5,330	15.16	14.86	11.34	17.07
51-5112	Printing Press Operators	2,190	16.24	14.94	11.34	18.68
43-4051	Customer Service Representatives	52,010	16.27	15.21	11.39	18.71
39-9031	Fitness Trainers and Aerobics Instructors	2,720	20.67	18.58	11.40	25.30
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	2,690	18.44	16.92	11.57	21.87
35-1011	Chefs and Head Cooks	1,740	21.42	16.74	11.59	26.33
47-3013	Helpers--Electricians	1,330	15.50	14.99	11.65	17.43
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical	21,050	16.90	16.43	11.72	19.48
29-2041	Emergency Medical Technicians and Paramedics	2,050	17.14	16.35	11.75	19.83
51-3021	Butchers and Meat Cutters	1,380	15.44	15.50	11.79	17.26
31-9094	Medical Transcriptionists	1,120	19.00	19.00	11.86	22.56
49-9071	Maintenance and Repair Workers, General	11,980	17.32	16.42	11.89	20.04

Source: Florida Department of Economic Development, 2019

ADJUSTMENT FROM EMPLOYEES TO EMPLOYEE HOUSEHOLDS

This step recognizes that there is, on average, more than one worker per household. As mentioned, a single wage earner does not represent the typical household. Therefore, SPG for purposes of comparison combined several job categories into two wage earner families to show the impact that more than one wage earner has on affordability. Selected household wage configurations are shown in Table 35.

Table 36 illustrates the impact of two wage earners on overall household income. Based on census data, slightly over 41 percent of households have two or more wage earners or 60 percent per working household. Furthermore, women's median income is only 63-80 percent of male median income.

Table 36: Selected Employees Pinellas County Household Wage Configurations

1 Worker Households		2-Worker Households	
Occupation	Avg. Wage/Yr.	Occupation	Avg. Wage/Yr.
Cashier	$19,600	Retail/Retail	$39,200
Retail Sales	$21,600	Electrician/Retail Sales	$53,400
Office Clerks	$29,800	Community Health Worker/Laborer	$60,100
Secretary	$33,800	Office Clerk/Retail Sales	$63,600
Electrician	$41,600	Firefighter/Secretary	$100,400
Teacher	$49,500	Civil Engineer/Teacher	$122,500
Fire Fighter	$66,600		
Registered Nurse	$68,000		
Police Officer	$70,000		
Civil Engineer	$72,966		

Source: Florida Department of Economic Opportunity, 2019

Ownership Housing Supply

In evaluating the supply of ownership housing within Pinellas County, SPG used MLS property sales and listings data. MLS data in general does not include all residential home sales for a given period. Some properties may be listed by an alternative service, never listed, and sold by owner/developer and not listed. In general, total MLS listings represent between 60 to 80 percent of the total real estate transactions in any given market.

MLS residential sales for 2018 showed that 17 percent of single family sales exceeded $400,000[28], with 141 units selling for over $1 million. While this exceeds the affordability of median income households, the City had 43 percent of its single family and 61 percent of its condo/townhouse sales for $200,000 or less.

GAP Analysis

Based on ACS data, 42.6 percent of owner occupied households spend over 30 percent of their income on housing (34 percent spend 35 percent or more). Approximately 52 percent of renter households spend over 30 percent for housing and 43.5 percent spend over 35 percent or more.

The ACS reported that the median ownership monthly cost was $1,150 in 2017, while gross monthly median rent was $1,224. REIS reports a median asking apartment rent of $1,138 in 2018. Households earning 80 percent of the City's median income can afford to pay $1,154[29] monthly for rent or afford an $185,500 townhouse/condominium. A 2019 median income household ($57,700[30]) can afford a monthly rental of approximately $1,443[31] or can afford a $229,400 priced home. As reported by the Census, MLS and REIS data, there is currently a significant workforce housing GAP especially for a 2 bedroom apartment.

[28] See Table 21.
[29] Does not include utilities
[30] ACS median of $55,134 inflated by 1.0468%
[31] As reported by REIS the asking rent for a 2 bedroom apartment is $1,987

CHAPTER 5 LINKAGE FEE ANALYSIS

LINKAGE FEE NEXUS

Linkage fees are a means for local government to collect monies to help support affordable/workforce housing. These fees, collected from market rate residential development and non-residential development, are placed in a trust fund to provide for the construction and maintenance of affordable residential units.

Under Florida law, there must be a rational relationship between the linkage/mitigation fee imposed and the impact of new construction on the need for affordable/workforce housing. The State of Florida has acknowledged that the need for affordable housing is a basic public need. The 1985 Growth Management Act (Chapter 163) requires every local government in the state adopt a housing element that addresses adequate and affordable housing for all of its current and anticipated populations, therefore establishing a nexus. Other Florida statues defining affordable housing needs include Chapter 187.201 and Chapter 125.01055. In addition to housing as a public need, studies show that households require the need for a whole range of public and private sector services that account for most of the job creation in any community including teachers, fire and crime prevention, grocers, hair salons, healthcare, restaurant workers, etc.[32] Lastly, especially in a built out city like St. Petersburg, new housing can result in the demolition or redevelopment of existing affordable housing into market grade housing thereby eliminating existing affordable housing stock.

Local governments must determine the need new market rate residential and non-residential developments create for housing that is affordable to the workforce, as a legal basis for establishing a workforce housing mitigation program.

RESIDENTIAL LINKAGE/IMPACT FEES

A key component of the analysis is the size of the affordability gap between what households can afford and the cost of producing additional housing. The analysis is conducted for 60 percent to 120 percent of median income. The analysis is also conducted for rental housing, as well as ownership housing from each of the three income categories.

INCOME AND HOUSEHOLD SIZE ASSUMPTIONS

This study uses St. Petersburg median household income to establish housing affordability gaps. The top income of the qualifying range in each category has been used to determine maximum housing costs in this analysis. The upper limit of households in the 80 percent of median category will be 120 percent of median, or the top end of the range.

CURRENT HOUSING COSTS

Current housing costs include the costs of existing homes in the market either for rent or for sale, as well as the costs associated with the development of new housing stock, either condominiums or townhomes. For purposes of this analysis, actual market information was developed for both rental housing units available in the area and recent home sales prices were obtained from MLS data.

SPG purchased an apartment survey for St. Petersburg, which comprised mostly mid-rise apartments, to identify current monthly rents. Asking rents for a studio was $1,222 and a 1-bedroom unit was $1,489 a

[32] Households spend a portion of their wages at the local grocery store, or shopping mall, which illustrates induced effects.

month. The average asking price for a 2-bedroom unit was $1,987 per month and the three bedrooms averaged $2,785 a month (Table 37).

Table 37: Market Rents

Comparable Group Summary Stats*	Low	Mean	Median	High
Current Asking Rent/Unit ($)	$814	$1,668	$1,138	$2,785
Current Vacancy Rate (%)	0.0	5.9	2.3	21.6
Property Size (units)	43	211	175	477
Year Built	1945	1997	1976	2018
	Studio	**1BR**	**2BR**	**3BR**
Current Asking Rent/Unit ($)	$1,222	$1,489	$1,987	$1,726
Unit Size (SF)	528	724	1,051	1,178
Units	20	102	85	4
Current Asking Rent/SF	$2.30	$2.03	$1.85	$1.45

Source: REIS, Inc., 2019

HOUSING AFFORDABILITY GAP

Affordability gaps, or the needed subsidy amount, are calculated for each of the income tiers. Then the affordability gaps (which is the difference between total development cost and unit value based on the affordable rent or sales price) are multiplied by the number of households in each income tier to produce the total nexus cost (i.e. mitigation costs).

OWNERSHIP HOUSING AFFORDABILITY GAP/LINKAGE FEE

This analysis determines the maximum purchase price for single family and townhouse/condominiums units for each of the income categories. SPG analyzed the affordability of townhomes/condominiums and single family homes based on household income categories based on St. Petersburg household income distribution metrics as well as income metrics. It should be noted that the MLS data used in this part of the analysis appears to be largely resales rather than new construction.

SPG's affordability analysis using the City income metrics shows that households earning 80 percent or more of the City's median household income can afford the sales price of existing condominium/townhomes, while households earning 120 percent or more can afford a single family MLS listed homes. Households earning the City's median household income can afford a townhouse/condominium but not a single family home.[33]

Table 38, utilizes MLS 2019 single family data for January and February. The townhouse/condominium prices use MLS 2018 year end data due to an anomaly with the 2019 data. It should be noted that MLS represents all home sales regardless of age. Because of the City's aging housing stock, the median MLS sale price is significantly lower than the cost of new housing.

[33] Assuming good credit and low debt

Table 38: Employee Household Affordability based on St. Petersburg Household Income Metrics

St. Petersburg	Income Targe % AMI	Annual HH Income	Maximum Sales Price	Median Value (2018)	Affordability Gap per Unit
Affordable Units					
CondominiumTownhomes (Based on Current MLS Data)				**$183,775**	
Very Low Income (50% of AMI)	50%	$28,850	$103,216		($80,559)
Very Low Income (60% of AMI)	60%	$34,620	$123,859		($59,916)
Low Income (80% of AMI)	80%	$46,160	$183,495		($280)
Moderate Income (120% of AMI)	120%	$69,240	$275,242		$91,467
Median Income		$57,700	$229,369		$45,594
Single Family Units (Based on Current MLS Data)				**$235,515**	
Very Low Income (50% of AMI)	50%	$28,850	$103,216		($132,299)
Very Low Income (60% of AMI)	60%	$34,620	$123,859		($111,656)
Low Income (80% of AMI)	80%	$46,160	$183,495		($52,020)
Moderate Income (120% of AMI)	120%	$69,240	$275,242		$39,727
Median Income		**$57,700**	$229,369		($6,146)

AMI - Area Median Income for as published by HUD/ACS.

Notes: Ongoing Expenses are based on estimates of utilities, homeowner association dues, property taxes, etc. based on unit value.

Annual debt service assumes a 30 year mortgage at 4.25%, 12% other debt, with a 10% down payment.

Source Pinellas Realtors, 2018/19 data

RENTAL/OWNER HOUSING AFFORDABILITY GAP

As mentioned, the above referenced prices are mainly derived from existing housing stock. In order to gauge the affordability SPG analyzed apartments as a prototype for residential.

Using existing rent for a two bedroom apartment[34] of $1,987 would result in average market value of $275,123 per unit. As shown in Table 39, none of the households earning 120% of the City's median household income could afford existing two bedroom rents.

Table 39: Current Apartment Rent Feasibility (2 Bedroom) based on St. Petersburg Household Income Ranges

(St. Petersburg Median Household Income) Apartment Project		Monthly Rent *	Annual Rent	Less Operating Expenses	NOI	Average Market Value	Affordable Gap per Unit	Average Unit Size	Commute Factor Linkage Fee
Market Rental Rates		$1,987	$23,844	$5,961	$17,883	$275,123		900	33%
Affordable Gap - Apartment Units									
Very Low Income (50% of AMI)		$721	$8,657	$5,961	$2,696	$41,479	($233,644)	(259.60)	(85.67)
Very Low Income (60% of AMI)		$866	$10,389	$5,961	$4,428	$68,116	($207,007)	(230.01)	(75.90)
Low Income (80% of AMI)		$1,154	$13,851	$5,961	$7,890	$121,391	($153,732)	(170.81)	(56.37)
Moderate Income (120% of AMI)		$1,731	$20,777	$5,961	$14,816	$227,941	($47,182)	(52.42)	(17.30)
		$962	$11,543	$5,961	$5,582	$85,875	($189,248)	(712.85)	(235.24)
GAP based on 60%-120%								(453.25)	(149.57)
GAP based on 80 - 120%								(223.24)	(73.67)
Based on ACS MHI inflated to 2019	$57,700								

Monthly rent does not include utilities. Operating Expenses are based on average operating expenses from similar size apartment projects 25%

Net Opearating Income (NOI) is capitalized at 6.5% to derive Average Market Value

Affordability Gap is the difference between value supported market rents and value supported at affordable income rent levels

SPG also developed a pro form analysis to determine the rental affordability of constructing a moderate two bedroom apartment as shown in Table 40. The affordability gap based on the following pro forma analysis for new moderate priced two bedroom apartments. Based on the analysis a household earning 120 percent of the City's median household income ($57,700) can afford an existing two bedroom

[34] Table 27

apartment. However, families earning 120 percent, or less, of the City's median family income cannot afford to rent a newly constructed two bedroom apartment. Table 40 also indicates that there is a $33.94 PSF GAP in funding apartments for new employees earning 120 percent or less of the City's median household income. If one was only seeking funding for supplying moderate income housing[35] the GAP is $18.15. It should be noted that this GAP or linkage cost is considered the maximum allowable and is not a recommended residential linkage fee.

Based on the City's median household income of $57,700, no households could afford renting a new two bedroom apartment.

Table 40: Residential GAP/Linkage Median Household Income Analysis

Affordability GAP Analysis	Based on St. Petersburg Income				
Apartments Based on St. Petersburg Median Household Income	**Market Grade**	**VLI (50%) Income**	**VLI (60%)**	**Low Income (60% -80)**	**Moderate Income (80%-120%)**
Land	9	9	9	9	9
Density/Acres	38	38	38	38	38
Units	327	327	327	327	327
Gross Unit Size	944	944	944	944	944
Unit Size	850	850	850	850	850
Average Bedroom	2	2	2	2	2
Person Per Per Bedroom	2	2	2	2	2
Cost Assumptions					
Land	$6,020,000	$6,020,000	$6,020,000	$6,020,000	$6,020,000
Land/Acre	$602,000	$602,000	$602,000	$602,000	$602,000
Land Per Unit	$18,421	$18,421	$18,421	$18,421	$18,421
Direct Costs	$44,444,800	$44,444,800	$44,444,800	$44,444,800	$44,444,800
Direct Construction Cost/Net SF	$160	$160	$160	$160	$160
Direct Construction Costs/Unit	$136,000	$136,000	$136,000	$136,000	$136,000
Indirect Costs as % of Direct costs	25%	25%	25%	25%	25%
Indirect Costs/Unit	$34,000	$34,000	$34,000	$34,000	$34,000
Profit Margin	12%	12%	12%	12%	12%
Profit	$22,611	$22,611	$22,611	$22,611	$22,611
Total Cost (includes parking)	**$211,032**	**$211,032**	**$211,032**	**$211,032**	**$211,032**
Cost PSF	**$248**	**$248**	**$248**	**$248**	**$248**
Maximum Supported Apartment/Price		50%	60%	80%	120%
Income Available /Year (Median Household Income); 5 % Vacancy Rate	$19,893	$6,991	$8,389	$11,185	$16,778
Less Operating Expenses	25%	25%	25%	25%	25%
Less Operating Expense per Unit	$4,973	$4,973	$4,973	$4,973	$4,973
Net Operating Income (NOI)	**$14,920**	**$2,017**	**$3,416**	**$6,212**	**$11,804**
Capitalization Rate	6.0%	6.0%	6.0%	6.0%	6.0%
Total Supportable Unit Value	$248,663	$33,623	$56,925	$103,530	$196,738
GAP	$37,631	($177,408)	($154,106)	($107,502)	($14,293)
GAP PSF	$44	($209)	($181)	($126)	($17)
Percent Employees		19%	4%	42%	14%
Total GAP PSF		($40.64)	($7.20)	($52.73)	($2.28)
Commute Adjustment (33%)		($13.41)	($2.38)	($17.40)	($0.75)
Rental GAP					($33.94)
GAP 60-120					($20.53)
GAP 80-120					($18.15)

[35] Household income of 80-120% AMI

NONRESIDENTIAL LINKAGE FEE

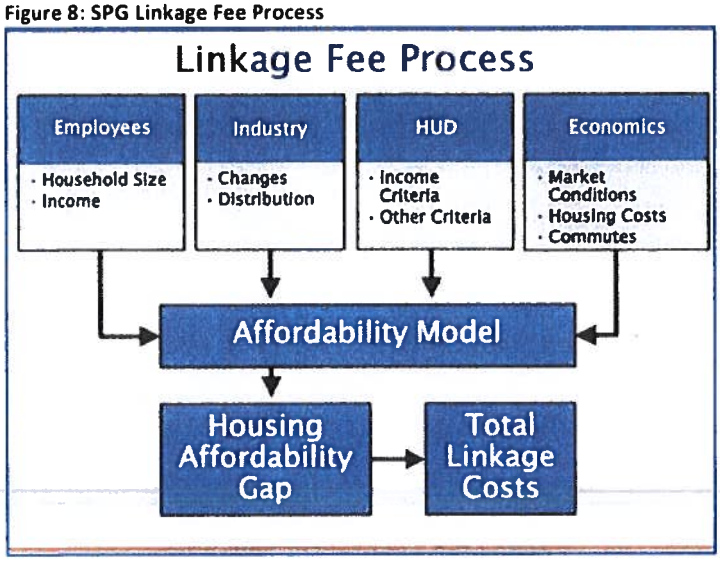
In cities like St. Petersburg that are experiencing growth, commercial development (usually office or retail space) often outpaces workforce housing production. This can create a jobs-housing imbalance, meaning there are not enough places for workers to live in the vicinity of their jobs. A jobs-housing imbalance drives up prices in the local housing market, and also leads to long commutes and traffic congestion as workers live farther from jobs, which affects the entire region. Linkage programs seek to correct this imbalance by tying the construction and maintenance of the affordable housing stock to commercial growth.

NONRESIDENT NEXUS STUDY

A Nexus study provides the required information for the workforce housing need created by new developments and provides statistical support for the fee calculation. The fee is typically calculated on a square foot basis or a per unit basis for residential.

The following diagram illustrates SPG Linkage Fee methodology.

Figure 8: SPG Linkage Fee Process



As discussed earlier, 32.9 percent of St. Petersburg resident workers actually worked within the City in 2015. Based on 2015 Census data[36], 75,841 employees worked within the City but resided elsewhere. This labor dynamic is not only based on housing costs and availability but is also influenced by other household earners work locations, quality schools, amenities, community services, etc.

To analyze the linkage between salaries and housing, SPG conducted a Nexus study using Pinellas 2018 wage data and translated wage to household income.

[36] ibid

NONRESIDENTIAL AFFORDABILITY/LINKAGE ANALYSIS

This section presents a summary of the analysis of the linkage between four types of workplace uses and the estimated number of worker households in the income categories that will, on average, be employed.

ANALYSIS APPROACH AND FRAMEWORK

The microanalysis is used to examine the employment associated with the development of 100,000 square foot building modules. Through a series of linkage steps, the number of employees is converted to households and housing units by affordability level. The findings are expressed in terms of numbers of households related to building area. In the final step, the numbers of households are converted back to the per-square-foot level.

The building types or land-use activities addressed in the analysis include industrial, commercial (including retail and other services), office and hotel. The income category addressed in the analysis, as defined by HUD, is Moderate Income (60 to 120 percent of median income).

Analysis Steps

The linkage analysis is comprised of several steps used to convert new employment into household and income categories to determine gaps in housing affordability at different income levels. The following is a description of each step of the analysis.

Step 1 – Estimate of Total Employees

Table 41 identifies the total number of direct employees who will work at or in the building type being analyzed. Employment density factors are used to make the conversion. The density factors used in this analysis are as follows:

- Office - 300 square feet per employee. Average office density has been decreasing from 350 square feet lower per employee to 200-300 square feet and depending on the character of the office activity (i.e., corporate headquarters versus back office).
  - ✓ Office includes the following NAICS industries: 51-55 and 62

- Commercial - 450 square feet per employee. This designation covers a wide range of land uses from restaurants and banks to other forms of retail outlets. The average number of employees per type of use also ranges broadly from a low employee count for discount stores to a high number of employees for a sit-down restaurant.
  - ✓ Commercial includes the following NAICS industries: 44-45 and 81

- Industrial – 800-1,450 square feet per employee. Industrial land uses include manufacturing, warehouses and industrial parks. Typically, industrial uses have the lowest employee count per square foot of building area.
  - ✓ Industrial includes the following NAICS industries: 31-33, 42,56, and 48-49

- Hotel – 1,300 square feet per employee or slightly over a third of an employee per room in a 500 square foot hotel room. This rate covers a cross section of hotel types from lower service hotels where rooms may be smaller than 500 square feet to higher-service convention hotels where average room size (inclusive of the meeting space, etc.) is larger, but the number of employees per room is higher.

- ✓ Hotel includes NAICS 721

- Extended/Limited Service Hotel 8,000 square feet per employee. Extended stay lodging is a subsector of hotels, but operates more as an apartment complex offering lodging services. Typically, this type of operation has only four to five full time equivalent employees. The extended stay facility does not offer any food or beverage services. The typical studio unit size ranges from 300 to 350 square feet.
  - ✓ Hotel includes NAICS 721

All density factors are averages and individual uses can be expected to be fairly divergent from the average occasionally. As mentioned, for ease of analysis and comparison purposes, this analysis is based on prototype buildings of 100,000 square feet in size. This size of building has been used in order to count jobs and housing units in whole numbers that can be readily understood. At the conclusion of the analysis, the findings are divided by building size to express the linkages per square foot, which are very small fractions of housing units.

Table 41: Estimate of Total New Employees in Prototype Building, 100,000 Sq. Ft.

	Industrial	Commercial	Office	Hotel	Limited Service /Estended Stay Lodging
Employees/1,000 SF	1.25	2.2	3.3	0.8	0.1
Space per Employee	800	450	300	1,300	8,000
Employees per Prototype	125	220	333	77	12.5

Note: All density factors are averages and individual uses can be expected to be fairly divergent

Source: ITE and Strategic Planning Group, Inc., 2019

Based on the density factors outlined above, the number of employees in the prototype 100,000 square foot building is as follows: office will house 330 employees, commercial 220 employees, industrial 125 employees, hotel 77 employees and limited service hotel 12.5 employees.

Step 2 – Adjustment for Changing Industries

This step is an adjustment to take into account any declines, changes and shifts within all sectors of the economy and to recognize that new space is not 100 percent equivalent to net new employees. For this analysis, a 5 percent adjustment is utilized to recognize the possibility of future declines and other adjustments (Table 42).

Table 42: Estimate of Employees after Adjustment

	Industrial	Commercial	Office	Hotel	Extended Stay Lodging
Number of Employees	125	220	333	77	13
Adjustment Factor	6	11	17	4	1
Employees after Adjustment	119	209	317	73	12

Note: This adjustment is to take into account any declines, changes and shifts within all sectors of the economy and to recognize that new space is not 100% equivalent to net new employees

Source: Strategic Planning Group, Inc., 2019

Step 3 – Industry Distribution of Employees

The distribution of employees is the first step in arriving at household income levels. The industry groupings were developed from the Quarterly Census of Employment and Wages (QCEW), also known as the ES-202 (Table 43).

- Industrial land uses were adjusted to reflect the types of industry classifications associated with this type of land use. These industries represent the workers associated with all types of manufacturing activities, the wholesale trade sector, the administration and support of waste management and remediation services, as well as the transportation and warehousing of products. Manufacturing represents 41 percent of this sector and Administration and Waste Services represents 35 percent of this sector, a major user of industrial space.

- Commercial land uses represent a very broad group of categories, primarily led by the retail trade comprising 80.6 percent of all uses. Also included in this land use category are other services which represent 19.4 percent.

- Office building industrial mix was adjusted to reflect the types of activities attracted to office space workers in the City. These industries represent a broad mix of professional service activities, including architecture and engineering, computer and mathematical, legal, management, business and financial operations, healthcare, and sales. The category also includes finance, insurance, and real estate type activities. Healthcare related activities represent 46.1 percent of this sector, while finance, insurance and real estate represent 13.6 percent and professional, scientific and technical services represent 19.6 percent.

- Hotel land use includes full service and limited service hotel accommodations with and without food services. Limited service or extended stay hotels have a minimum of employees.

Table 43: Industrial Distribution of Employees in Pinellas County by Land Use Category

Industry Title	NAICS Code	Total Wages	Average Employment	Percent Land Use	Annual Wage
Total, All Industries	10	$5,257,348,154	393,736		$53,408
Office					
Information	51	$106,158,438	6,549	4.1%	$64,836
Finance and Insurance	52	$514,774,260	21,642	13.6%	$95,144
Real Estate and Rental and Leasing	53	$124,471,872	10,577	6.7%	$47,072
Professional and Technical Services	54	$573,207,919	31,176	19.6%	$73,544
Management of Companies and Enterprises	55	$469,515,150	15,685	9.9%	$119,740
Health Care and Social Assistance	62	$1,001,865,873	73,234	46.1%	$54,720
			158,863	100%	
Hotel					
Accommodation and Food Services	72	$262,218,544	48,900	100%	$21,448
Industrial					
Manufacturing	31-33	$586,886,589	32,892	41.0%	$71,372
Wholesale Trade	42	$261,800,052	13,565	16.9%	$77,200
Administrative and Waste Services	56	$242,705,653	28,146	35.1%	$34,492
Transportation and Warehousing	48-49	$68,747,423	5,552	6.9%	$49,528
			80,155		
Commercial					
Retail Trade	44-45	$452,213,531	54,879	80.6%	$32,960
Other Services, Except Public Administration	81	$122,410,078	13,238	19.4%	$36,988

Source: Strategic Planning Group, Inc., 2019

In this step, employment is translated to income based on Pinellas County wage and salary information for each building type. The wage and salary information provide the income inputs to the Attainable Housing Model. Workers identified in the earlier steps as being wholesale/retail warehouse workers versus workers in a retail establishment or office workers are analyzed separately.

Step 4 – Adjustment from Employees to Employee Households

This step (Table 44) converts the number of employees to the number of employee households by land-use type that will work in the building type being analyzed. This step recognizes that there is, on average, more than one worker per household thus, the number of housing units in demand for new workers must be reduced. The workers/worker household ratio has eliminated from the equation all non-working households, such as retired persons, students, and those on public assistance. This step in the analysis calculates the number of employee households for each size of household based on the number of employed.

Table 44: Convert New Employees to Land Uses

Industry Title	NAICS Code	Average Employment	Percent Land Use
Office		**317**	**44.1%**
Information	51	13	4.1%
Finance and Insurance	52	43	13.6%
Real Estate and Rental and Leasing	53	21	6.7%
Professional and Technical Services	54	62	19.6%
Management of Companies and Enterprises	55	31	9.9%
Health Care and Social Assistance	62	146	46.1%
		317	100%
Hotel			**0.0%**
Accommodation	721	73	100%
Industrial		**119**	**16.6%**
Manufacturing	31-33	49	41.0%
Wholesale Trade	42	20	16.9%
Administrative and Waste Services	56	42	35.1%
Transportation and Warehousing	48-49	8	6.9%
		119	100%
Commercial		**209**	**29.1%**
Retail Trade	44-45	168	80.6%
Other Services, Except Public Administration	81	41	19.4%
		209	100.0%

Step 5 – Estimates of Employee Households Meeting the Lower Income Definitions

In this step, the analysis calculates the number of employee households that fall into each income category for each size household. Individual employee by industry sector was used to calculate the number of households that fall into these income categories by assuming that multiple earner households are, on average, formed of individuals falling within the same income categories.

Table 45: Adjustment from Employee to Employee Households – Industrial (Manufacturing NAICS 31-33)

Occupation title	Employment	Percent of total employment	Median hourly wage	Median Annual	Household Income Factor	Estimate Household Income
All Occupations	**49**	**100.00%**	**$19.36**	**$30,976**	**1.6**	**$49,562**
Food Preparation and Serving Related Occupations	0	0.51%	$11.12	$17,792	1.6	$28,467
Personal Care and Service Occupations	0	0.02%	$11.74	$18,784	1.6	$30,054
Building and Grounds Cleaning and Maintenance Occupations	0	0.52%	$13.16	$21,056	1.6	$33,690
Farming, Fishing, and Forestry Occupations	0	0.26%	$13.26	$21,216	1.6	$33,946
Transportation and Material Moving Occupations	4	7.87%	$15.31	$24,496	1.6	$39,194
Production Occupations	25	51.33%	$16.92	$27,072	1.6	$43,315
Protective Service Occupations	0	0.11%	$17.74	$28,384	1.6	$45,414
Office and Administrative Support Occupations	4	9.02%	$18.12	$28,992	1.6	$46,387
Healthcare Support Occupations	0	0.01%	$19.37	$30,992	1.6	$49,587
Construction and Extraction Occupations	1	1.55%	$22.75	$36,400	1.6	$58,240
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.70%	$23.45	$37,520	1.6	$60,032
Installation, Maintenance, and Repair Occupations	2	5.07%	$23.91	$38,256	1.6	$61,210
Education, Training, and Library Occupations	0	0.01%	$25.79	$41,264	1.6	$66,022
Community and Social Service Occupations	0	0	$26.12	$41,792	1.6	$66,867
Sales and Related Occupations	2	3.28%	$26.96	$43,136	1.6	$69,018
Life, Physical, and Social Science Occupations	0	0.98%	$29.55	$47,280	1.6	$75,648
Healthcare Practitioners and Technical Occupations	0	0.21%	$32.08	$51,328	1.6	$82,125
Business and Financial Operations Occupations	2	3.94%	$33.07	$52,912	1.6	$84,659
Architecture and Engineering Occupations	3	6.53%	$38.10	$60,960	1.6	$97,536
Computer and Mathematical Occupations	1	2.38%	$45.36	$72,576	1.6	$116,122
Management Occupations	3	5.64%	$56.13	$89,808	1.6	$143,693
Legal Occupations	0	0.06%	$65.59	$104,944	1.6	$167,910

Table 46: Wholesale Trade (NAICS 42)

Occupation title	Employment	Percent of total employment	Median hourly wage	Median Annual Wage	Household Income Factor	Estimate Household Income
All Occupations	**20**	**100.00%**	**$20.63**	**$33,008**	**1.6**	**$52,813**
Food Preparation and Serving Related Occupations	0	0.14%	$11.07	$17,712	1.6	$28,339
Farming, Fishing, and Forestry Occupations	0	0.76%	$12.11	$19,376	1.6	$31,002
Personal Care and Service Occupations	0	0.03%	$12.32	$19,712	1.6	$31,539
Building and Grounds Cleaning and Maintenance Occupations	0	0.46%	$13.09	$20,944	1.6	$33,510
Protective Service Occupations	0	0.07%	$13.86	$22,176	1.6	$35,482
Healthcare Support Occupations	0	0.03%	$15.51	$24,816	1.6	$39,706
Transportation and Material Moving Occupations	4	20.25%	$15.62	$24,992	1.6	$39,987
Production Occupations	1	5.47%	$15.75	$25,200	1.6	$40,320
Office and Administrative Support Occupations	4	22.36%	$17.06	$27,296	1.6	$43,674
Arts, Design, Entertainment, Sports, and Media Occupations	0	1.26%	$19.05	$30,480	1.6	$48,768
Construction and Extraction Occupations	0	0.45%	$21.03	$33,648	1.6	$53,837
Installation, Maintenance, and Repair Occupations	1	6.57%	$21.94	$35,104	1.6	$56,166
Healthcare Practitioners and Technical Occupations	0	0.47%	$24.51	$39,216	1.6	$62,746
Education, Training, and Library Occupations	0	0.01%	$25.91	$41,456	1.6	$66,330
Sales and Related Occupations	5	24.80%	$27.05	$43,280	1.6	$69,248
Community and Social Service Occupations	0	0.01%	$28.58	$45,728	1.6	$73,165
Life, Physical, and Social Science Occupations	0	0.25%	$30.31	$48,496	1.6	$77,594
Business and Financial Operations Occupations	1	5.07%	$30.51	$48,816	1.6	$78,106
Computer and Mathematical Occupations	1	3.00%	$37.85	$60,560	1.6	$96,896
Architecture and Engineering Occupations	0	1.09%	$38.09	$60,944	1.6	$97,510
Legal Occupations	0	0.07%	$46.32	$74,112	1.6	$118,579
Management Occupations	1	7.36%	$54.60	$87,360	1.6	$139,776

Table 47 Administration and Waste Services (NAICS 56)

Occupation title	Employment	Percent of total employment	Median hourly wage	Average Annual Household	Household Income Factor	Estimate Household Income
All Occupations	**42**	**100.00%**	**$14.28**	**$22,848**	**1.6**	**$36,557**
Personal Care and Service Occupations	0	0.95%	$11.22	$17,952	1.6	$28,723
Food Preparation and Serving Related Occupations	0	1.11%	$11.44	$18,304	1.6	$29,286
Production Occupations	4	8.93%	$12.14	$19,424	1.6	$31,078
Farming, Fishing, and Forestry Occupations	0	0.17%	$12.19	$19,504	1.6	$31,206
Transportation and Material Moving Occupations	5	12.60%	$12.23	$19,568	1.6	$31,309
Building and Grounds Cleaning and Maintenance Occupations	9	20.97%	$12.25	$19,600	1.6	$31,360
Protective Service Occupations	4	8.85%	$12.55	$20,080	1.6	$32,128
Education, Training, and Library Occupations	0	0.84%	$12.90	$20,640	1.6	$33,024
Healthcare Support Occupations	0	1.12%	$13.70	$21,920	1.6	$35,072
Office and Administrative Support Occupations	8	20.31%	$15.06	$24,096	1.6	$38,554
Sales and Related Occupations	2	5.45%	$15.27	$24,432	1.6	$39,091
Construction and Extraction Occupations	1	2.61%	$17.99	$28,784	1.6	$46,054
Installation, Maintenance, and Repair Occupations	1	2.67%	$20.07	$32,112	1.6	$51,379
Community and Social Service Occupations	0	0.20%	$20.18	$32,288	1.6	$51,661
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.59%	$24.23	$38,768	1.6	$62,029
Life, Physical, and Social Science Occupations	0	0.33%	$27.61	$44,176	1.6	$70,682
Healthcare Practitioners and Technical Occupations	1	1.66%	$28.06	$44,896	1.6	$71,834
Business and Financial Operations Occupations	2	4.07%	$28.98	$46,368	1.6	$74,189
Legal Occupations	0	0.25%	$31.67	$50,672	1.6	$81,075
Architecture and Engineering Occupations	0	0.83%	$35.75	$57,200	1.6	$91,520
Computer and Mathematical Occupations	1	2.38%	$36.77	$58,832	1.6	$94,131
Management Occupations	1	3.12%	$47.58	$76,128	1.6	$121,805

Table 48: Transportation and Warehousing (NAICS 48-49)

Occupation title	Employment	Percent of total employment	Median hourly wage	Average Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**8**	**100.00%**	**$19.69**	**$31,504**	**1.6**	**$50,406**
Community and Social Service Occupations	0	0	0	0	1.6	$0
Personal Care and Service Occupations	0	0.30%	$11.53	18,448	1.6	$29,517
Food Preparation and Serving Related Occupations	0	0.15%	$12.56	20,096	1.6	$32,154
Protective Service Occupations	0	0.73%	$13.54	21,664	1.6	$34,662
Farming, Fishing, and Forestry Occupations	0	0.05%	$14.17	22,672	1.6	$36,275
Building and Grounds Cleaning and Maintenance Occupations	0	0.61%	$16.89	27,024	1.6	$43,238
Transportation and Material Moving Occupations	5	58.56%	$18.44	29,504	1.6	$47,206
Office and Administrative Support Occupations	2	24.91%	$19.79	31,664	1.6	$50,662
Production Occupations	0	1.31%	$20.43	32,688	1.6	$52,301
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.08%	$23.71	37,936	1.6	$60,698
Sales and Related Occupations	0	1.19%	$25.34	40,544	1.6	$64,870
Installation, Maintenance, and Repair Occupations	0	5.59%	$25.95	41,520	1.6	$66,432
Construction and Extraction Occupations	0	0.60%	$27.59	44,144	1.6	$70,630
Education, Training, and Library Occupations	0	0.01%	$28.64	45,824	1.6	$73,318
Healthcare Practitioners and Technical Occupations	0	0.12%	$28.75	46,000	1.6	$73,600
Business and Financial Operations Occupations	0	1.79%	$30.89	49,424	1.6	$79,078
Life, Physical, and Social Science Occupations	0	0.03%	$36.25	58,000	1.6	$92,800
Architecture and Engineering Occupations	0	0.47%	$36.42	58,272	1.6	$93,235
Computer and Mathematical Occupations	0	0.50%	$36.83	58,928	1.6	$94,285
Management Occupations	0	2.92%	$44.65	71,440	1.6	$114,304
Legal Occupations	0	0.03%	$60.77	97,232	1.6	$155,571

Table 49: Retail Trade (NAICS 44-45)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual median wage	Household Multiplier	Estimate Household Income
All Occupations	**168**	**100.00%**	**$11.96**	**$19,136**	**1.6**	**$30,618**
Personal Care and Service Occupations	1	0.47%	$10.53	$16,848	1.6	$26,957
Food Preparation and Serving Related Occupations	6	3.51%	$11.08	$17,728	1.6	$28,365
Sales and Related Occupations	92	54.48%	$11.20	$17,920	1.6	$28,672
Building and Grounds Cleaning and Maintenance Occupations	1	0.76%	$11.51	$18,416	1.6	$29,466
Transportation and Material Moving Occupations	11	6.75%	$11.82	$18,912	1.6	$30,259
Office and Administrative Support Occupations	30	17.69%	$12.42	$19,872	1.6	$31,795
Production Occupations	4	2.38%	$13.97	$22,352	1.6	$35,763
Arts, Design, Entertainment, Sports, and Media Occupations	1	0.78%	$14.25	$22,800	1.6	$36,480
Protective Service Occupations	1	0.38%	$14.53	$23,248	1.6	$37,197
Installation, Maintenance, and Repair Occupations	8	4.80%	$17.71	$28,336	1.6	$45,338
Construction and Extraction Occupations	0	0.23%	$18.36	$29,376	1.6	$47,002
Healthcare Practitioners and Technical Occupations	6	3.46%	$18.42	$29,472	1.6	$47,155
Business and Financial Operations Occupations	2	1.01%	$27.68	$44,288	1.6	$70,861
Computer and Mathematical Occupations	1	0.31%	$30.74	$49,184	1.6	$78,694
Management Occupations	4	2.55%	$37.75	$60,400	1.6	$96,640

Table 50: Other Services, Except Public Administration (NAICS 81)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual Median	Household Income Factor	Estimate Household Income
All Occupations	**41**	**100.00%**	**$15.03**	**$24,048**	**1.6**	**$38,477**
Protective Service Occupations	0	1.03%	$11.33	$18,128	1.6	$29,005
Transportation and Material Moving Occupations	4	9.88%	$11.36	$18,176	1.6	$29,082
Personal Care and Service Occupations	9	22.62%	$11.85	$18,960	1.6	$30,336
Production Occupations	3	6.76%	$12.14	$19,424	1.6	$31,078
Sales and Related Occupations	2	4.98%	$12.45	$19,920	1.6	$31,872
Farming, Fishing, and Forestry Occupations	0	0.07%	$14.66	$23,456	1.6	$37,530
Office and Administrative Support Occupations	6	14.52%	$15.12	$24,192	1.6	$38,707
Education, Training, and Library Occupations	1	1.69%	$15.57	$24,912	1.6	$39,859
Healthcare Support Occupations	1	1.44%	$17.81	$28,496	1.6	$45,594
Community and Social Service Occupations	1	2.79%	$18.05	$28,880	1.6	$46,208
Installation, Maintenance, and Repair Occupations	7	18.25%	$18.89	$30,224	1.6	$48,358
Construction and Extraction Occupations	0	0.31%	$23.65	$37,840	1.6	$60,544
Arts, Design, Entertainment, Sports, and Media Occupations	1	2.19%	$24.89	$39,824	1.6	$63,718
Healthcare Practitioners and Technical Occupations	0	0.33%	$26.20	$41,920	1.6	$67,072
Business and Financial Operations Occupations	3	6.23%	$28.43	$45,488	1.6	$72,781
Life, Physical, and Social Science Occupations	0	0.34%	$29.35	$46,960	1.6	$75,136
Computer and Mathematical Occupations	0	0.88%	$33.52	$53,632	1.6	$85,811
Architecture and Engineering Occupations	0	0.21%	$36.53	$58,448	1.6	$93,517
Management Occupations	2	5.27%	$42.90	$68,640	1.6	$109,824
Legal Occupations	0	0.21%	$44.30	$70,880	1.6	$113,408

Table 51: Information (NAICS 51)

Occupation title	Employment	Percent of total employment	Median hourly wage	Median Annual Wage	Household Income Factor	Estimate Household Income
All Occupations	**13**	**100.00%**	**$29.51**	**$47,216**	**1.6**	**$75,546**
Food Preparation and Serving Related Occupations	0	1.85%	$9.92	$15,872	1.6	$25,395
Personal Care and Service Occupations	0	2.54%	$10.11	$16,176	1.6	$25,882
Building and Grounds Cleaning and Maintenance Occupations	0	0.25%	$12.89	$20,624	1.6	$32,998
Transportation and Material Moving Occupations	0	1.51%	$13.95	$22,320	1.6	$35,712
Healthcare Support Occupations	0	0.02%	$14.94	$23,904	1.6	$38,246
Production Occupations	0	1.08%	$17.56	$28,096	1.6	$44,954
Office and Administrative Support Occupations	2	15.99%	$18.28	$29,248	1.6	$46,797
Protective Service Occupations	0	0.19%	$18.51	$29,616	1.6	$47,386
Education, Training, and Library Occupations	0	0.71%	$22.36	$35,776	1.6	$57,242
Community and Social Service Occupations	0	0.01%	$23.24	$37,184	1.6	$59,494
Sales and Related Occupations	1	11.53%	$25.38	$40,608	1.6	$64,973
Arts, Design, Entertainment, Sports, and Media Occupations	2	16.25%	$26.68	$42,688	1.6	$68,301
Installation, Maintenance, and Repair Occupations	1	9.36%	$28.30	$45,280	1.6	$72,448
Healthcare Practitioners and Technical Occupations	0	0.09%	$30.96	$49,536	1.6	$79,258
Construction and Extraction Occupations	0	0.39%	$31.37	$50,192	1.6	$80,307
Business and Financial Operations Occupations	1	8.31%	$37.35	$59,760	1.6	$95,616
Life, Physical, and Social Science Occupations	0	0.08%	$37.91	$60,656	1.6	$97,050
Architecture and Engineering Occupations	0	1.47%	$44.07	$70,512	1.6	$112,819
Computer and Mathematical Occupations	3	20.46%	$44.09	$70,544	1.6	$112,870
Legal Occupations	0	0.34%	$65.15	$104,240	1.6	$166,784
Management Occupations	**0.985435**	**0.0759**	**66.81**	**106896**	**1.60**	**171033.6**

Table 52: Finance and Insurance (NAICS 52)

Occupation title	Employment	Percent of total employment	Median hourly wage	Median Annual Wage	Household Income Factor	Estimate Household Income
All Occupations	**43**	**100.00%**	**$25.10**	**$40,160**	**1.6**	**$64,256**
Building and Grounds Cleaning and Maintenance Occupations	0	0.16%	$11.94	$19,104	1.6	$30,566
Food Preparation and Serving Related Occupations	0	0.01%	$13.75	$22,000	1.6	$35,200
Personal Care and Service Occupations	0	0.02%	$15.76	$25,216	1.6	$40,346
Transportation and Material Moving Occupations	0	0.04%	$16.46	$26,336	1.6	$42,138
Office and Administrative Support Occupations	18	42.11%	$17.43	$27,888	1.6	$44,621
Farming, Fishing, and Forestry Occupations	0	-7	$17.72	$28,352	1.6	$45,363
Healthcare Support Occupations	0	0.02%	$18.26	$29,216	1.6	$46,746
Installation, Maintenance, and Repair Occupations	0	0.19%	$20.87	$33,392	1.6	$53,427
Production Occupations	0	0.03%	$20.94	$33,504	1.6	$53,606
Protective Service Occupations	0	0.16%	$22.46	$35,936	1.6	$57,498
Community and Social Service Occupations	0	0.14%	$25.81	$41,296	1.6	$66,074
Sales and Related Occupations	6	15.02%	$26.03	$41,648	1.6	$66,637
Construction and Extraction Occupations	0	0.01%	$29.51	$47,216	1.6	$75,546
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.31%	$31.39	$50,224	1.6	$80,358
Education, Training, and Library Occupations	0	0.01%	$32.89	$52,624	1.6	$84,198
Healthcare Practitioners and Technical Occupations	0	0.77%	$33.68	$53,888	1.6	$86,221
Business and Financial Operations Occupations	11	24.84%	$34.51	$55,216	1.6	$88,346
Legal Occupations	0	0.87%	$38.24	$61,184	1.6	$97,894
Life, Physical, and Social Science Occupations	0	0.05%	$39.51	$63,216	1.6	$101,146
Computer and Mathematical Occupations	3	6.81%	$43.76	$70,016	1.6	$112,026
Architecture and Engineering Occupations	0	0.07%	$46.43	$74,288	1.6	$118,861
Management Occupations	4	8.37%	$62.38	$99,808	1.6	$159,693

Table 53: Real Estate, Rental and Leasing (NAICS 53)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**21**	**100.00%**	**$17.71**	**$28,336**	**1.6**	**$45,338**
Food Preparation and Serving Related Occupations	0	0.81%	$11.24	$17,984	1.6	$28,774
Building and Grounds Cleaning and Maintenance Occupations	1	6.48%	$13.13	$21,008	1.6	$33,613
Transportation and Material Moving Occupations	1	6.88%	$13.28	$21,248	1.6	$33,997
Personal Care and Service Occupations	0	1.04%	$13.31	$21,296	1.6	$34,074
Farming, Fishing, and Forestry Occupations	0	0.03%	$14.37	$22,992	1.6	$36,787
Healthcare Support Occupations	0	0.04%	$15.35	$24,560	1.6	$39,296
Sales and Related Occupations	5	21.98%	$15.70	$25,120	1.6	$40,192
Production Occupations	0	0.53%	$16.06	$25,696	1.6	$41,114
Office and Administrative Support Occupations	4	20.86%	$16.41	$26,256	1.6	$42,010
Protective Service Occupations	0	1.36%	$16.53	$26,448	1.6	$42,317
Installation, Maintenance, and Repair Occupations	4	18.33%	$17.75	$28,400	1.6	$45,440
Education, Training, and Library Occupations	0	0.02%	$20.20	$32,320	1.6	$51,712
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.99%	$20.93	$33,488	1.6	$53,581
Community and Social Service Occupations	0	0.09%	$21.02	$33,632	1.6	$53,811
Construction and Extraction Occupations	0	1.25%	$21.14	$33,824	1.6	$54,118
Healthcare Practitioners and Technical Occupations	0	0.26%	$24.50	$39,200	1.6	$62,720
Business and Financial Operations Occupations	1	5.76%	$29.86	$47,776	1.6	$76,442
Life, Physical, and Social Science Occupations	0	0	$30.41	$48,656	1.6	$77,850
Legal Occupations	0	0.36%	$33.58	$53,728	1.6	$85,965
Management Occupations	3	11.91%	$34.03	$54,448	1.6	$87,117
Computer and Mathematical Occupations	0	0.81%	$34.19	$54,704	1.6	$87,526
Architecture and Engineering Occupations	0	0.16%	$34.76	$55,616	1.6	$88,986

Table 54: Professional and Technical Services (NAICS 54)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**62**	**100.00%**	**$31.43**	**$50,288**	**1.6**	**$80,461**
Personal Care and Service Occupations	0	0.41%	$10.87	$17,392	1.6	$27,827
Food Preparation and Serving Related Occupations	0	0.10%	$11.17	$17,872	1.6	$28,595
Healthcare Support Occupations	1	0.94%	$12.55	$20,080	1.6	$32,128
Building and Grounds Cleaning and Maintenance Occupations	0	0.33%	$13.25	$21,200	1.6	$33,920
Transportation and Material Moving Occupations	1	0.81%	$14.73	$23,568	1.6	$37,709
Farming, Fishing, and Forestry Occupations	0	0.06%	$15.22	$24,352	1.6	$38,963
Office and Administrative Support Occupations	12	19.13%	$18.24	$29,184	1.6	$46,694
Production Occupations	1	1.50%	$18.85	$30,160	1.6	$48,256
Protective Service Occupations	0	0.17%	$18.99	$30,384	1.6	$48,614
Healthcare Practitioners and Technical Occupations	2	2.44%	$22.86	$36,576	1.6	$58,522
Installation, Maintenance, and Repair Occupations	1	0.86%	$23.75	$38,000	1.6	$60,800
Community and Social Service Occupations	0	0.12%	$25.65	$41,040	1.6	$65,664
Construction and Extraction Occupations	1	0.87%	$25.84	$41,344	1.6	$66,150
Arts, Design, Entertainment, Sports, and Media Occupations	3	4.08%	$26.59	$42,544	1.6	$68,070
Sales and Related Occupations	3	4.77%	$28.42	$45,472	1.6	$72,755
Education, Training, and Library Occupations	0	0.17%	$29.43	$47,088	1.6	$75,341
Life, Physical, and Social Science Occupations	2	3.61%	$32.18	$51,488	1.6	$82,381
Business and Financial Operations Occupations	9	15.23%	$34.29	$54,864	1.6	$87,782
Architecture and Engineering Occupations	6	10.44%	$36.82	$58,912	1.6	$94,259
Legal Occupations	5	7.53%	$37.00	$59,200	1.6	$94,720
Computer and Mathematical Occupations	11	17.30%	$42.34	$67,744	1.6	$108,390
Management Occupations	6	9.12%	$66.00	$105,600	1.6	$168,960

Table 55: Management of Companies and Enterprises (NAICS 55)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**31**	**100.00%**	**$32.06**	**$51,296**	**1.6**	**$82,074**
Building and Grounds Cleaning and Maintenance Occupations	0	0.46%	$12.74	$20,384	1.6	$32,614
Personal Care and Service Occupations	0	0.46%	$13.32	$21,312	1.6	$34,099
Food Preparation and Serving Related Occupations	0	0.51%	$14.45	$23,120	1.6	$36,992
Farming, Fishing, and Forestry Occupations	0	0.03%	$15.60	$24,960	1.6	$39,936
Healthcare Support Occupations	0	0.38%	$15.76	$25,216	1.6	$40,346
Transportation and Material Moving Occupations	1	2.25%	$16.63	$26,608	1.6	$42,573
Protective Service Occupations	0	0.44%	$17.99	$28,784	1.6	$46,054
Office and Administrative Support Occupations	8	24.90%	$19.37	$30,992	1.6	$49,587
Education, Training, and Library Occupations	0	0.25%	$20.07	$32,112	1.6	$51,379
Community and Social Service Occupations	0	0.93%	$20.31	$32,496	1.6	$51,994
Production Occupations	0	1.03%	$21.20	$33,920	1.6	$54,272
Installation, Maintenance, and Repair Occupations	1	1.86%	$23.45	$37,520	1.6	$60,032
Construction and Extraction Occupations	0	0.48%	$25.40	$40,640	1.6	$65,024
Sales and Related Occupations	1	4.48%	$28.91	$46,256	1.6	$74,010
Arts, Design, Entertainment, Sports, and Media Occupations	1	1.82%	$29.46	$47,136	1.6	$75,418
Healthcare Practitioners and Technical Occupations	1	1.64%	$32.11	$51,376	1.6	$82,202
Business and Financial Operations Occupations	7	22.55%	$34.94	$55,904	1.6	$89,446
Life, Physical, and Social Science Occupations	0	0.75%	$40.29	$64,464	1.6	$103,142
Computer and Mathematical Occupations	4	11.48%	$41.62	$66,592	1.6	$106,547
Architecture and Engineering Occupations	1	3.00%	$45.01	$72,016	1.6	$115,226
Legal Occupations	0	1.11%	$58.80	$94,080	1.6	$150,528
Management Occupations	6	19.17%	$62.89	$100,624	1.6	$160,998

Table 56: Health Care and Social Assistance (NAICS 62)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**146**	**100.00%**	**$18.16**	**$29,056**	**1.6**	**$46,490**
Personal Care and Service Occupations	19	12.87%	$11.18	$17,888	1.6	$28,621
Farming, Fishing, and Forestry Occupations	0	0.01%	$11.34	$18,144	1.6	$29,030
Food Preparation and Serving Related Occupations	4	2.62%	$11.58	$18,528	1.6	$29,645
Building and Grounds Cleaning and Maintenance Occupations	3	2.13%	$11.95	$19,120	1.6	$30,592
Production Occupations	1	0.42%	$12.22	$19,552	1.6	$31,283
Transportation and Material Moving Occupations	1	0.67%	$12.31	$19,696	1.6	$31,514
Education, Training, and Library Occupations	4	2.74%	$12.96	$20,736	1.6	$33,178
Healthcare Support Occupations	26	18.01%	$13.73	$21,968	1.6	$35,149
Protective Service Occupations	1	0.38%	$15.69	$25,104	1.6	$40,166
Sales and Related Occupations	1	0.38%	$16.46	$26,336	1.6	$42,138
Office and Administrative Support Occupations	20	13.92%	$16.63	$26,608	1.6	$42,573
Community and Social Service Occupations	8	5.47%	$18.76	$30,016	1.6	$48,026
Installation, Maintenance, and Repair Occupations	1	0.74%	$19.21	$30,736	1.6	$49,178
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.18%	$23.49	$37,584	1.6	$60,134
Construction and Extraction Occupations	0	0.09%	$25.22	$40,352	1.6	$64,563
Business and Financial Operations Occupations	2	1.69%	$27.74	$44,384	1.6	$71,014
Healthcare Practitioners and Technical Occupations	48	32.98%	$32.00	$51,200	1.6	$81,920
Legal Occupations	0	0.03%	$33.12	$52,992	1.6	$84,787
Computer and Mathematical Occupations	1	0.67%	$33.47	$53,552	1.6	$85,683
Life, Physical, and Social Science Occupations	1	0.55%	$34.35	$54,960	1.6	$87,936
Architecture and Engineering Occupations	0	0.03%	$34.78	$55,648	1.6	$89,037
Management Occupations	5	3.43%	$41.87	$66,992	1.6	$107,187

Table 57: Accommodations (NAICS 721)

Occupation title (click on the occupation title to view its profile)	Employment	Percent of total employment	Median hourly wage	Annual Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**73**	**100.00%**	**$10.57**	**$16,912**	**1.6**	**$27,059**
Transportation and Material Moving Occupations	2	2.06%	$9.78	$15,648	1.6	$25,037
Sales and Related Occupations	2	3.27%	$10.06	$16,096	1.6	$25,754
Food Preparation and Serving Related Occupations	58	80.05%	$10.35	$16,560	1.6	$26,496
Building and Grounds Cleaning and Maintenance Occupations	3	4.50%	$11.10	$17,760	1.6	$28,416
Personal Care and Service Occupations	1	1.20%	$11.16	$17,856	1.6	$28,570
Farming, Fishing, and Forestry Occupations	0	0.01%	$11.48	$18,368	1.6	$29,389
Production Occupations	1	0.73%	$11.81	$18,896	1.6	$30,234
Life, Physical, and Social Science Occupations	0	0	$12.09	$19,344	1.6	$30,950
Office and Administrative Support Occupations	2	3.42%	$12.30	$19,680	1.6	$31,488
Healthcare Support Occupations	0	0.07%	$13.08	$20,928	1.6	$33,485
Protective Service Occupations	0	0.60%	$13.26	$21,216	1.6	$33,946
Education, Training, and Library Occupations	0	0.01%	$14.85	$23,760	1.6	$38,016
Installation, Maintenance, and Repair Occupations	1	0.92%	$15.27	$24,432	1.6	$39,091
Arts, Design, Entertainment, Sports, and Media Occupations	0	0.13%	$17.81	$28,496	1.6	$45,594
Community and Social Service Occupations	0	0	$22.17	$35,472	1.6	$56,755
Construction and Extraction Occupations	0	0.04%	$23.04	$36,864	1.6	$58,982
Business and Financial Operations Occupations	0	0.40%	$23.83	$38,128	1.6	$61,005
Computer and Mathematical Occupations	0	0.03%	$25.76	$41,216	1.6	$65,946
Healthcare Practitioners and Technical Occupations	0	0.04%	$26.19	$41,904	1.6	$67,046
Management Occupations	2	2.52%	$26.67	$42,672	1.6	$68,275
Architecture and Engineering Occupations	0	0	$33.87	$54,192	1.6	$86,707
Legal Occupations	0	0	$51.95	$83,120	1.6	$132,992

Step 6 – Estimates of Households that meet HUD Income Criteria (Affordability Model)

For this step, an affordability model was developed to determine the affordability of households by HUD's income and levels. This step has been performed for each industry/land-use category and multiplied by the number of households demand by and type of land-use.

Table 58: Distribution of Employees by Income Group

Employment Category	VLI <50%	VLI 50-60%	VLI 60-80%	Work 120%	Above >120%
Office	45	33	71	66	181
Hotel	182	0	0	7	1
Limited Service Hotel	4	0	7	1	0
Industrial	23	0	86	25	33
Commercial	26	0	186	17	7

The analysis adjusted employee and their wages into households by using a worker to household factor as shown below.

Table 59: Conversation of Jobs to Households

Employment Category	VLI <50%	VLI 50-60%	VLI 60-80%	Work 120%	Above >120%
Office	28	21	44	41	113
Hotel/Food and Accommodation	114	0	0	4	1
Limited Service	3	0	4	0	0
Industrial	14	0	54	16	21
Commercial	16	0	116	11	4
Workers Per Household	1.6	1.6	1.6	1.6	1.6

Table 60 shows the maximum household income for each income category.

Table 60: Summary of Household Income by Land Use

Households by Land Use	VLI <50%	VLI 50-60%	VLI 60-80%	Work 120%	Above >120%
Household Income (max)	$28,394	$34,073	$45,430	$68,146	>$78,800
Office	28	21	44	41	103
Hotel/Food and Accommodation	114	0	0	4	1
Limited Service Hotel	3	0	4	0	0
Industrial	14	0	54	16	21
Commercial (retail)	16	0	116	11	4
Total	175	21	219	73	129

ADJUSTMENT FOR COMMUTE RELATIONSHIP

Table 61 depicts the results of the analysis both before and after an adjustment for commute relationship. The American Community Survey (US Census) 2013-17 indicated that residents of St. Petersburg hold only 33 percent of the jobs in the City. Therefore the commute factor used in this analysis is 33 percent. The estimates of households for each income category in a 100,000 square foot prototype building are adjusted downwards by this commute factor.

Table 61: Worker Households Adjusted for Commute Factor

Before Commute Adjustment	Industrial	Commercial	Office	Hotel	Limited Service Hotel
Very Low (Under 60% of Median Income)	14	16	49	114	3
Low (60% to 80% of Median Income)	54	116	44	0	4
Moderate (80% to 120% of Median Income)	16	11	41	4	0
Total	84	143	134	118	7
After Commute Adjustment	33.0%				
Very Low (Under 60% of Median Income)	5	5	16	38	1
Low (60% to 80% of Median Income)	18	38	15	0	1
Moderate (80% to 120% of Median Income)	5	4	14	1	0
	28	47	44	39	2

Note Residents of St Petersburg hold 33.2% of the jobs in St Petersburg The estimates of households for each income category in a protypical 100,000 SF building are adjusted downwards by this commute factor

TOTAL LINKAGE COSTS

Nonresidential Linkage Fees

The last step in the linkage fee analysis marries the findings on the numbers of households at each of the income ranges associated with the four types of buildings to the affordability gaps, or the costs of delivering housing in St. Petersburg. The number of households associated with each building type, by income category, and is indicated on the left side of the table, are drawn from the end of the previous section's analysis, still assuming 100,000 sq. ft. buildings. The affordability gaps are from the prior discussion. The commercial development linkage fee per square foot shows the results of the calculation

which is the number of units times the affordability gap, divided by 100,000 sq. ft. to bring the conclusion back to the per square foot level.

The total linkage costs are calculated for the total impacts, as indicated in the upper portion of the table, and after an adjustment for the fact that only a share of the worker households will seek housing in St. Petersburg. The Census indicates that 33 percent of those who work in St. Petersburg also live in the City. Therefore, the commute factor used in this analysis is 33 percent.

Tables 62 and 63 summarizes what SPG calculates as the maximum linkage fees for the new development by development sector based on new construction.

Table 62: Linkage Fee Based on New Construction Data

Before Commute Adjustment	Industrial	Commercial	Office	Hotel	Limited Servi Hotel	Gap	Affordability Industrial	Commercial	Office	Hotel	Limited Service Hotel
Very Low (Under 60% of Median Income)	14	16	45	44	3	-$220,325	-$31.67	-$36.29	-$98.32	-$96.51	-$5.51
Low (60% to 80% of Median Income)	54	116	42	0	4	-$153,732	-$82.63	-$178.71	-$64.86	$0.00	-$6.73
Moderate (80% to 120% of Median Income)	16	11	39	4	0	-$47,182	-$7.45	-$5.01	-$18.63	-$2.06	-$0.15
Total	84	143	126	48	7		-$121.75	-$220.02	-$181.80	-$98.58	-$12.38
After Commute Adjustment	33%						33%				
Very Low (Under 60% of Median Income)	5	5	15	14	1	-$220,325	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
Low (60% to 80% of Median Income)	18	38	14	0	1	-$153,732	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
Moderate (80% to 120% of Median Income)	5	4	13	1	0	-$47,132	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
Total	28	47	42	16	2		-40.18	-72.61	-59.99	-32.53	-4.09

Table 63: Summary Nonresidential Linkage Fee Based on New Construction Data

	Industrial	Commercial	Office	Hotel	Extended Stay
Rental					
Very low income	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
Low income	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
Moderate income	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
Rental	**-$40.18**	**-$72.61**	**-$59.99**	**-$32.53**	**-$4.09**

Based on the methodology used in the analysis (Table 63), the Max attainable housing linkage fee based on new housing costs are:

- an industrial land use the fee would be $40 per square foot of building area;
- a commercial land use the fee would be $73 per square foot of building area;
- an office land use the fee would be $60 per square foot of building area;
- a hotel the fee would be $33 per square foot of building area
- a limited or extended stay hotel fee would be $4 per square foot of building area

The numbers in Table 64 present the total jobs housing linkage costs per square foot of building area for each of the building types. These total commercial development linkage costs represent the ceiling for any requirements placed on new construction for attainable housing. The GAP analysis used 2018 MLS data. As shown in Table 64, only households earning less than 60 percent of St. Petersburg median

household income have deficits (red). All other household income groups should be able to afford housing assuming good credit.

The totals are not the recommended linkage fees. They should be considered as the maximums established by this analysis, which impact fees may be set.

Table 64: Linkage Fee Based on MLS Data

Before Commute Adjustment	Industrial	Commercial	Office	Hotel	Limited Service Hotel	Gap	Affordability Industrial	Commercial	Office	Hotel	Limited Service Hotel
Condominiums/Townhouses											
Very Low (under 60% of Median Income)	14	16	45	44	3	-$70,238	$10.10	$11.57	-$31.34	$30.77	-$1.76
Low (60% to 80% of Median Income)	54	116	42	0	4	-$280	-$0.15	-$0.33	$0.12	$0.00	-$0.01
Moderate (80% to 120% of Median Income)	16	11	39	4	0	$91,467	$14.44	$9.72	$36.11	$4.00	$0.29
Total	84	143	126	48	7		$4.20	-$2.18	$4.65	-$26.77	-$1.48
Single Family											
Very Low (Under 60% of Median Income)	14	26	71	70	4	$121,978	-$17.53	-$32.15	-$87.09	-$85.49	-$4.88
Low (60% to 80% of Median Income)	54	186	67	0	7	-$52,020	-$27.96	-$96.76	-$35.11	$0.00	-$3.64
Moderate (80% to 120% of Median Income)	16	17	63	7	1	$39,727	$6.27	$6.75	$25.09	$2.78	$0.20
Total	84	229	202	77	12		-$39.22	-$122.15	-$97.11	-$82.71	-$8.32
After Commute Adjustment	33%						33%				
Condominums											
Very Low (Under 60% of Median Income)	5	5	15	14	1	-$70,238	-$3.33	-$3.82	-$10.34	-$10.15	-$0.58
Low (60% to 80% of Median Income)	18	38	14	0	1	$280	-$0.05	-$0.11	-$0.04	$0.00	$0.00
Moderate (80% to 120% of Median Income)	5	4	13	1	0	$91,467	$4.77	$3.21	$11.92	$1.32	$0.09
Total	28	47	42	16	2		$1.38	-$0.72	$1.53	-$8.83	-$0.49
Single Family											
Very Low (Under 60% of Median Income)	5	9	24	23	1	$121,978	$5.79	$10.61	-$28.74	-$28.21	-$1.61
Low (60% to 80% of Median Income)	18	61	22	0	2	-$52,020	-$9.23	-$31.93	-$11.59	$0.00	-$1.20
Moderate (80% to 120% of Median Income)	5	6	21	2	0	$39,727	$2.07	$2.23	$8.28	$0.92	$0.07
Total	28	76	67	25	4		-$12.94	-$40.31	-$32.05	-$27.29	-$2.75

Table 65: Summary Nonresidential Linkage Fee Based on MLS Data

	Industrial	Commercial	Office	Hotel	Extended Stay Hotel
Townhome					
Very low income	-$3.33	-$3.82	-$10.34	-$10.15	-$0.58
Low income	-$0.05	-$0.11	-$0.04	$0.00	$0.00
Moderate income	$4.77	$3.21	$11.92	$1.32	$0.09
Total	$1.38	-$0.72	$1.53	-$8.83	-$0.49
Single Family					
Very low income	-$5.79	-$10.61	-$28.74	-$28.21	-$1.61
Low income	-$9.23	-$31.93	-$11.59	$0.00	-$1.20
Moderate income	$2.07	$2.23	$8.28	$0.92	$0.07
Total	-$12.94	-$40.31	-$32.05	-$27.29	-$2.75
Combined					
Very low income	-$9.12	-$14.43	-$39.08	-$38.37	-$2.19
Low income	-$9.28	-$32.04	-$11.63	$0.00	-$1.21
Moderate income	$6.84	$5.44	$20.20	$2.24	$0.16
Total	-$11.56	-$41.03	-$30.51	-$36.13	-$3.24

The Max attainable housing linkage fee based on MLS housing sales are:

- an industrial land use the fee would be $12 per square foot of building area;
- a commercial land use the fee would be $41 per square foot of building area;
- an office land use the fee would be $31 per square foot of building area;
- a hotel the fee would be $36 per square foot of building area
- a limited or extended stay hotel fee would be $3 per square foot of building area

Based on the analysis on nonresidential impacts using 2018 MLS data to define demand, only households having less than the median household income show a deficit. In combining Townhome and Single Family linkages results in only the hotel sector produces a deficit which is hotel.

The linkage fees shown in Table 67 are a realistic assessment of St. Petersburg attainable/workforce housing market. They should be seen as a beginning point rather than the final fee structure. Most, if not all, governmental entities adjusted the final fees to reflect local economic and political conditions. Should the City adopt linkage/impact fees, those fees should be subject to CPI increases.

Table 67: Recommended Nonresidential Linkage Fee

	Industrial	Commercial	Office	Hotel	Extended Stay Hotel
New Construction					
Very low income	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
Low income	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
Moderate income	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
Total	-$40.18	-$72.61	-$59.99	-$32.53	-$4.09
MLS Pricing					
Very low income	-$9.12	-$14.43	-$39.08	-$38.37	-$2.19
Low income	-$9.28	-$32.04	-$11.63	$0.00	-$1.21
Moderate income	$6.84	$5.44	$20.20	$2.24	$0.16
Total	-$11.56	-$41.03	-$30.51	-$36.13	-$3.24
Combined Average					
Very low income	-$9.78	-$13.20	-$35.76	$35.11	-$2.00
Low income	-$18.27	-$45.51	-$16.51	$0.00	-$1.71
Moderate income	$2.19	$1.89	$7.02	$0.78	$0.06
Total	-$25.87	-$56.82	-$45.25	-$34.33	-$3.66

The Max attainable housing linkage fee based on averaging the new construction and MLS data are:

- Industrial land use fee would be $26 per square foot of building area;
- Commercial land use fee would be $57 per square foot of building area;
- Office land use fee would be $45 per square foot of building area;
- Hotel fee would be $34 per square foot of building area
- Limited or extended stay hotel fee would be $4 per square foot of building area

As discussed in this report, additional funds may be available from other funding sources like CDBG, LIHTC, HOME, SHIP, Penny for Pinellas, etc., to offset the cost of providing workforce housing.

In addition to fees generated with a commercial development linkage fees, there are a number of programs focused on establishing an attainable workforce and attainable housing program including providing Accessory Dwelling Units, exemption or reduction of parking regulations, permits, etc.

STRAIGHT WORKFORCE HOUSING PERMIT FEE

Winter Park was the first City in Florida to establish an attainable housing linkage fee that applied to all new construction (or major reconstruction) residential or commercial. The single fee ($1 per square foot) was treated like all other "permit fees" and the revenues placed in the City's Housing Trust Fund. The City of Jupiter recently enacted a linkage fee program using a single fee for residential and non-residential developments. SPG used this approach for the City of St. Petersburg, in its development financial pro forma analysis on new construction (or major redevelopment/rehabs).

The City of Denver uses both a straight Workforce Housing Fee as well as Workforce Housing Residential Incentives. It uses a mandatory workforce housing incentive program as well as a "workforce housing permit type of fee" approach.

The City of Boulder uses a host of attainable housing revenue sources including a Housing Excise Fee. The fee is $.23 per square foot for residential and $.51 for non-residential.

CHAPTER 6: LINKAGE FEE IMPACT ON DEVELOPMENT

PRO FORMA ANALYSIS

SPG prepared a financial feasibility analysis of the various development prototypes using a pro forma model that measures the return on cost (ROC) and return on equity (ROE). Discussions of the various metrics used are described below:

CAP Rate: The capitalization rate, often referred to as the "cap rate", is a fundamental concept used in the world of commercial real estate. It is the rate of return on a real estate investment property based on the income that the property is expected to generate. This metric is used to estimate the investor's potential return on an investment[37]. This analysis uses cap rates to estimate the fair market value of the various development prototypes. The analysis uses cap rates obtained from nationalcaprate.com for the Tampa Bay area.

Return on Cost (ROC): A cash-on-cash return is a rate of return often used in real estate transactions that calculates the cash income earned on the cash invested in a property. Put simply, cash-on-cash return measures the annual return the investor made on the property in relation to the amount of mortgage paid during the same year[38]. This study uses the stabilized net operating income for each prototype divided by the total estimated development cost. The study assumes the ROC should be at least 1.5% above the local cap rate.

Return of Equity (ROE): This ratio is a fundamental financial measurement used in calculating the annual rate of return on the "net" equity (or "trapped equity") in a property. Return on Equity helps an investor understand if a property should continue to be held. It is defined as the capitalized net operating income less total development costs divided by the amount of equity invested and then divided by the estimated term of the investment.

DESCRIPTION OF PROTOTYPES USED IN THE ANALYSIS

Table 68 on the next page describes the various development profiles used in the financial analysis. It should be noted that for both the hotel and office analysis, SPG used two separate types of developments: regular development and Downtown Development (DC).

The following tables provide operation information that forms the basis of the pro forma financial analysis of each development prototype. The two most important factors that could impact the analysis are land costs and revenue generation.

[37] https://www.investopedia.com/terms/c/capitalizationrate.asp
[38] www.investopedia.com/terms/c/cashoncashreturn.asp

Table 68: Prototype Description

	Hotel	Hotel DC	Retail/ Restaurant/ Services	Office	Office DC	Industrial	Apartment
Prototype Description							
Gross Building Area (GBA)	100,000	100,000	25,000	50,000	50,000	150,000	150,000
Podium Parking Area	0	11,250	0	0	30,000	0	0
Gross Building Area including Parking	100,000	111,250	25,000	50,000	80,000	150,000	225,000
Net Leasable Sq. Ft. (%)	na		100%	90%	90%	100%	90%
Net Leasable Sq. Ft. (NSF)	100,000	100,000	25,000	45,000	45,000	150,000	135,000
Hotel Rooms	150	150					
Room Size	380						
Number of Apartments							150
Site Coverage	75%	75%	60%	75%	75%	45%	40%
Building SF	100,000	145,000	25,000	50,000	50,000	150,000	150,000
Parking Spaces							
Podium Spaces	0	38	0	0	100	0	0
Surface Spaces	150		1,125	167	0	50	225
Floor Area Ratio	2.00	2.00	0.20	2.00	2.00	0.4	1.00
Land Area (acres)	1.1	1.3	1.0	1.5	1.5	7.7	8.6
Land Area (SF)	50,000	55,625	41,667	66,667	66,667	333,333	375,000
Land Cost @ acre	$700,000	$1,100,000	$700,000	$700,000	$1,100,000	$450,000	$600,000
SF	$16.07	$25.25	$16.07	$16.07	$25.25	$10.33	$13.77
Equity	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Loan	0.7	0.7	0.7	0.7	0.7	0.7	0.7

As shown below, both the downtown developments, hotel and office, assume podium parking rather than on surface parking.

Table 69: Development Assumptions

Development Assumptions	Metric	Hotel	Hotel DC	Retail/ Restaurant/ Services	Office	Office DC	Industrial	Apartment
Direct Costs								
Building & On-Site Improvements	per sq. ft. of GBA	$180	$200	$120	$150	$180	$50	$125
Parking Costs - Podium (1)	per space	$24,000	$24,000			$24,000	na	
Parking Costs - Surface	per space	$2,500		$2,500	$2,500		$0	$2,500
Indirect Costs	0.22							
Tenant Improvements	per NSF	$0	$0	$25	$40	$50	$0	$0
Cap Rate	5.0% - 7.5%							
Return on Cost	7% to 8%							

(1) carlwalker.com, 2017 Miami costs inflated

Table 70: Revenue Assumptions

Prototype	Metric	Input	Steady State
Hotel			
Gross Annual Room Income	RevPAR (1)	$54,750	$8,212,500
Gross Annual Other Income (10%)	Per Room	$5,475	$821,250
Less: Vacancy	25%	$15,056	-$2,258,438
Less: Operation Expenses	70%	$48,043	-$4,742,719
Annual Net Income			$2,032,594
(1) revenue per available room			
Hotel Downtown			
Gross Annual Room Income	RevPAR	$73,000	$10,950,000
Gross Annual Other Income (20%)	Per Room	$14,600	$2,190,000
Less: Vacancy	25%	$21,900	-$3,285,000
Less: Operation Expenses	70%	$67,890	-$6,898,500
Annual Net Income			$2,956,500
Retail/Restaurant/Services			
Revenues and Expenses			
Monthly Rent-Triple Net	per NSF	$30	$750,000
Operating Expenses	% of Gross	40%	-$300,000
Vacancy Rate	% of Gross	5%	-$37,500
Estimates			
Net Square Footage		25,000	25,000
Annual Gross Revenues		$750,000	750,000
Operating Expenses		($300,000)	-300,000
Vacancy Rate		($37,500)	-37,500
Annual Net Operating Income		$412,500	$412,500
Office			
Revenues and Expenses			
Monthly Rent-Triple Net	per NSF	$25	$1,125,000
Operating Expenses	% of Gross	25%	-$281,250
Vacancy Rate	% of Gross	5%	-$56,250
Estimates			
Net Square Footage		45,000	45,000
Annual Gross Revenues		$1,125,000	$1,125,000
Operating Expenses		($281,250)	-$281,250
Vacancy Rate		($56,250)	-$56,250
Annual Net Operating Income		$787,500	$787,500
Office Downtown			
Revenues and Expenses			
Monthly Rent-Triple Net	per NSF	$35	$1,575,000
Operating Expenses	% of Gross	20%	-$315,000
Vacancy Rate	% of Gross	5%	-$78,750
Estimates			
Net Square Footage		45,000	45,000
Annual Gross Revenues		$1,575,000	$1,575,000
Operating Expenses		($315,000)	-$315,000
Vacancy Rate		($78,750)	-$78,750
Annual Net Operating Income		$1,181,250	$1,181,250
Industrial			
Revenues and Expenses			
Monthly Rent-Triple Net	per NSF	$7	$1,080,000
Operating Expenses	% of Gross	0%	$0
Vacancy Rate	% of Gross	0%	$0
Estimates			
Net Square Footage		150,000	$150,000
Annual Gross Revenues		$1,080,000	$1,080,000
Operating Expenses		$0	$0
Vacancy Rate		$0	$0
Annual Net Operating Income		$1,080,000	$1,080,000
Residential Rental (2 Bedroom)			
Revenue and Expenses			
Monthly Rent	per NSF	$1.97	$3,186,000
Operating Expenses	% of Gross	0.45	-$1,433,700
Vacancy Rate	% of Gross	5%	-$159,300
Annual Net Operating Income		$2.47	$1,593,000

FINANCIAL ANALYSIS

As shown in Table 71, none of the development prototypes are financially feasible using maximum linkage/impact fees.

The analysis also analyzed the financial effects of implementing a range of impacts fees from $1 per square gross foot of development to $5 per square gross foot. Based the assumptions given, this level of impact fee has minor effects on the financial performance of each prototype.

Table 71: Development Feasibility

	Metric	Hotel		Hotel-DC		Retail/Restaurant/ Services		Office		Office-DC		Industrial		Apartment (2 Bedroom)	
Development Costs		per SF of GBA	Total	per SF of GBA	Total	per SF of GBA	Total	per SF of GBA	Total	per SF of GBA	Total	per SF of GBA	Total	per SF of GBA	Total
Land (1)		$16.07	$803,489	$25.25	$1,404,672	$30.00	$669,575	$21.43	$1,071,319	$33.67	$1,683,502	$22.96	$3,443,526	$16.44	$3,698,000
Direct Costs															
Building & On-Site Improvements		$180	$18,000,000	$220	$29,000,000	$120	$3,000,000	$150	$7,500,000	$175	$9,000,000	$50	$7,500,000	$144	$44,444,800
Parking (Surface)	$2,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Podium/Structured	$24,000				$900,000						$2,400,000				
Total Direct Costs		$180	$18,000,000	$220	$29,900,000	$120	$3,000,000	$150	$7,500,000	$175	$11,400,000	$50	$7,500,000	$144.00	$44,444,800
Indirect Costs (2)															
Hotel Indirect Costs @	25%	$45.00	$4,500,000	$50.00	$7,250,000										
Retail Indirect Costs @	25%					$30.00	$750,000								
Office Indirect Costs @	20%							$30.00	$1,500,000	$45.60	$2,280,000				
Industrial Indirect Costs @	25%											$12.50	$1,875,000		
Apartment Indirect Costs@	25%													$13.31	$8,888,960
Total Indirect Costs	20%	$45.00	$4,500,000	$50.00	$7,250,000	$30.00	$750,000	$30.00	$1,500,000	$45.60	$2,280,000	$12.50	$1,875,000	$13.31	$8,888,960
Total Development Costs (TDC) without Nexus Fees															
No Fee		$233	$23,303,489	$386	$38,554,672	$177	$4,419,575	$201	$10,071,319	$307.27	$15,363,502	$85	$12,818,526	$205	$57,031,760
Maximum Linkage Fees		$46.74	$4,674,000	$46.74	$4,674,000	$78.81	$1,970,250	$62.79	$3,139,500	$62.79	$3,139,500	$41.30	$6,195,000	$33.94	$9,427,853
Total Development Costs (TDC)		$280	$27,977,489	$432	$43,228,672	$256	$6,389,825	$264	$13,210,819		$18,503,002	$127	$19,013,526	$239	$66,459,613
Linkage Fee ($1 per GBA)	$1.00	0.429%	$100,000	0.259%	$100,000	0.566%	$25,000	0.496%	$50,000	0.325%	$50,000	1.170%	$150,000	0.487%	$308,644
		$234	$23,403,489	$387	$38,654,672	$178	$4,444,575	$202	$10,121,319	$308	$15,413,502	$86	$12,968,526	$206	$57,340,404
Linkage Fee ($5 per GBA)	$5.00	2.146%	$500,000	1.297%	$500,000	2.828%	$125,000	2.482%	$250,000	1.627%	$250,000	5.851%	$750,000	2.090%	$1,543,222
		$238	$23,803,489	$391	$39,054,672	$187	$4,544,575	$206	$10,321,319	$312	$15,613,502	$90	$13,568,526	210	$58,574,982
Equity	30%	$70	$6,991,047	$116	$11,566,402	$53.03	$1,325,872	$60.43	$3,021,396	$92.18	$4,609,051	$25.64	$3,845,558	$61.59	$17,109,528
Loan (mortgage)	70%	$163	$16,312,443	$270	$26,988,270	$123.75	$3,093,702	$141.00	$7,049,923	$215.09	$10,754,451	$59.82	$8,972,368	$798.44	$39,922,232
Revenue															
Gross Income							$750,000								
Annual Net Operating Income		$20.33	$2,032,594	$29.57	$2,956,500	$8.25	$412,500	$15.75	$787,500	$23.63	$1,181,250	$7.20	$1,080,000	$17.55	$4,875,774
Per Room or NSF			$13,551			$16.50									
CAP (3)			5.50%		5.50%		5.43%		5.44%		5.44%		4.74%		5.37%
Maximum Value		$369.56	$36,956,250	$537.55	$53,754,545	$303.87	$7,596,685	$96.51	$14,476,103	$144.76	$21,714,154	$151.90	$22,784,810		$90,796,542
Less Development Cost		$233.03	$23,303,489	$385.55	$38,554,672	$176.78	$4,419,575	$67.14	$10,071,319	$102.42	$15,363,502	$85.46	$12,818,526		$57,031,760
Profit Before Fees (NSF)		$136.53	$13,652,761	$152.00	$15,199,874	$127.08	$3,177,111	$29.37	$4,404,784	$42.34	$6,350,653	$66.44	$9,966,284		$33,764,782
Fees as % of TDC															
No Fee			$0		$0		$0		$0		$0		$0		0
Maximum Linkage Fees		20.06%	$4,674,000	12.12%	$4,674,000	44.58%	$1,970,250	31.17%	$3,139,500	20.43%	$3,139,500	48.33%	$6,195,000	16.53%	$9,427,853
	$1.00	0.43%	$100,000	0.26%	$100,000	0.57%	$25,000	0.50%	$50,000	0.33%	$50,000	1.17%	$150,000	0.49%	$277,790
	$5.00	2.15%	$500,000	1.30%	$500,000	2.83%	$125,000	2.43%	$250,000	1.63%	$250,000	5.85%	$750,000	2.44%	$1,388,900
Equity Investment Analysis															
Equity as % TDC			30%		30%		30%		30%		30%		30%		30%
Return on Equity (ROE)			6.00%		6.00%		6.00%		6.00%		6.00%		6.00%		6.00%
No Linkage Fee (investment period in months)	20		9.76%		6.57%		11.98%		7.29%		6.89%		12.96%		9.87%
Maximum Linkage Fees (pg 61)			6.42%		4.55%		4.55%		2.09%		3.48%		4.90%		7.11%
	$1.00		9.69%		6.53%		11.89%		7.21%		6.84%		12.76%		9.79%
	$5.00		9.41%		6.35%		11.51%		6.88%		6.62%		11.98%		9.46%
Return on Cost (ROC) (4)	0.015		7.00%		7.00%		6.93%		6.94%		6.94%		6.24%		6.87%
No Fee			8.72%		7.67%		9.33%		7.82%		7.63%		8.43%		8.55%
Maximum Linkage Fees (pg 61)			7.27%		6.84%		6.46%		5.96%		6.38%		5.68%		7.34%
$1.00			8.69%		7.65%		9.28%		7.78%		7.66%		8.33%		8.50%
$5.00			8.54%		7.57%		9.08%		7.63%		7.57%		7.96%		8.32%

(1) Loopnet.com
(2) include A&E, construction financing,permits and fees, legal, accounting, insurance and developer overhead
(3) nationalcapaate/Tampa.com, second quarter 2019
(4) cap rate plus 0.015%

EXEMPTIONS

The following are potential exemptions to the payment of linkage fees:[39]

1. Construction upon any property which is the subject of a preexisting contractual agreement
2. Affordable housing projects that are constructed with the support of any combination of federal, state or local financial resources, including private activity bonds, tax credits, grants, loans or other subsidies to incentivize the development of affordable housing.
3. Any housing project financed or constructed by or on behalf of the Pinellas or St. Petersburg Housing Authorities
4. Residential units built by any charitable, religious, or other non-profit entity and deed restricted to ensure the affordability of the dwelling unit to low and moderate income households.
5. Nonresidential projects that are built by any charitable, religious or other nonprofit entity and that are primarily used to provide shelter, housing assistance or related services to low income households.
6. Construction by or on behalf to the Federal, State or local government to the extent any or all of the gross floor area in the structure will be used solely for a government or educational purpose
7. Any structure that is being reconstructed due to involuntary demolition or destruction including involuntary man made forces
8. An addition of four hundred (400) gross square feet or less to an existing structure containing a single unit dwelling or a two unit dwelling
9. Accessory dwelling units
10. City granted waiver or fee reduction for a nonresidential project due to proof of lack of employment impact.

POTENTIAL WORKFORCE HOUSING IMPACT FEE REVENUE

Utilizing data from the City, SPG projected the potential revenue stream of a $1 and a $5 impact fee. Annually, the revenue which should be placed in a Housing Trust Fund could generate $2.1 million using a $1 impact fee or $10.4 million using a $5 impact fee. Over a 10 year period the funds could generate between $20.8 million and $104 million in workforce housing revenues.

Table 72: Impact Fee Revenue

	10 Year Projection	Annual	Linkage Fee (Annual)	
Proposed Impact Fee			$1	$5
Residential	13,842,821	1,384,282	$1,384,282	$6,921,411
Office	829,130	82,913	$82,913	$414,565
Industrial	49,437	4,944	$4,944	$24,719
Hotel	557,662	55,766	$55,766	$278,831
Retail	761,238	76,124	$76,124	$380,619
Mixed Use	1,506,000	150,600	$150,600	$753,000
Non Residential other	3,248,446	324,845	$324,845	$1,624,223
Total Annual	20,794,734	2,079,473	$2,079,473	$10,397,367
Total 10 Year			**$20,794,734**	**$103,973,670**

[39] Based on Denver's recent updates to its Affordable Impact Fee Program

It should be noted that the City of Coconut Creek has collected $2.7 million in nonresidential linkage fees.

ALTERNATIVE TO FEE PAYMENT

The City should provide an alternative to a developer to propose an alternative to paying a housing impact fee, such as onsite (or in close proximity) construction of affordable rental units.

As an alternative to the linkage fee requirement defined earlier in this report, the City may wish to allow a developer to build or provide affordable housing units on site or within a mile radius of the development site based on the following formula. The formula is based on the assumption that 59% of the City's households earn less than 120% of the City of St. Petersburg's medium household income. It utilizes the GAPs quantified earlier in the report divided by the market value of a new two bedroom apartment. For example, 150,000 sf multifamily development divided by 1,000 (average two bedroom apartment) times the GAP divided by the market value of an apartment equals the number of apartment required to be built.

Residential GAP of $33.94 x 1,000 = $33,940 *.59 (% less than 120 AMI) =$20,025 divided by $248,663 (market value of a 2 bedroom apartment) = .08053. Using 150 units times 1,000 sf = 150,000 sf/1,000 sf = 150 units *.08053 = 12.12.08, or 12 apartment units (round to whole number).

1. Structures containing multiunit dwellings:
   (Gross square feet of structure/1,000) * .08053 = number of units

2. Structures containing any primary industrial, manufacturing and wholesale or primary agricultural uses:
   (Gross square feet of structure/1,000) * .01516 = number of units

3. Structures containing any primary commercial sales, service and repair uses or any primary civic, public and institutional uses:
   (Gross square feet of structure/1,000) * .1155 = number of units

4. Structures containing any primary office uses:
   (Gross square feet of structure /1,000) * .01214 = number of units

5. Structures containing primary hotel uses:
   (Gross square feet of structure/1,000) * .2222 = number of units

APPENDIX

DEVELOPER FEE COMPARISON

SPG was asked to compare St. Petersburg's developer fees to its main competition: Clearwater, Hillsborough County, Pinellas County and Tampa. A direct comparison is difficult as each jurisdiction has different metrics used to calculate fees. For example the City of Tampa uses building square footage to calculate its fees while St. Petersburg uses building value.

Tampa, Clearwater, and Pinellas County have online permit cost calculators that provide a rough cost estimate and are subject to more detailed review. The St. Petersburg Building Department provided gross permit cost data for several building prototypes while Hillsborough costs were calculated based on online cost tables. Individual cost schedules follow this table.

Table A1: Comparison of Developer and Mobility Fees

	SF	Construction Value	Building Permit	Total Permit Fees	Plan Review	Total Fees	Mobility Impact Fee
St. Petersburg							(1)
Office	100,000	$15,000,000	$32,190	$79,869	$13,600	$95,931	$222,600
Commercial	50,000	$5,000,000	$16,500	$30,513	$5,479	$37,068	$103,950
Hotel	468,000	$60,000,000	$134,700	$211,532	$38,963	$256,757	$537,420
Multi Family (390 units)	468,000	$60,000,000	$134,700	$211,532	$38,963	$256,757	$379,080
Industrial	100,000	$4,000,000	$13,500	$27,373	$4,851	$33,131	$113,700
Tampa (2)	https://apps.tampagov.net/csd_fee_estimator_webapp/						
Office	100,000	$15,000,000	included	included	$8,206	$20,515	$475,900
Commercial	50,000	$5,000,000	included	included	$14,226	$35,565	$325,100
Hotel	468,000	$60,000,000	included	included	$48,006	$120,014	$896,610
Multi Family	468,000	$60,000,000	included	included	$48,006	$120,014	$434,460
Industrial	100,000	$4,000,000	included	included	$5,410	$13,524	$167,600
Pinellas County	http://www.pinellascounty.org/build/calculator.htm						
Office	100,000	$15,000,000	$68,250	included	$22,750	$93,796	$276,700
Commercial	50,000	$5,000,000	$24,625	included	$8,208	$33,884	$169,800
Hotel (3)	468,000	$60,000,000	nc	nc	nc	nc	$625,560
Multi Family (3)	468,000	$60,000,000	nc	nc	nc	nc	$553,800
Industrial	100,000	$4,000,000	$34,428	included	$11,476	$47,347	$141,400
Hillsborough County							
Office	100,000	$15,000,000	(4)	(4)	$9,135	$9,135	$532,700
Commercial	50,000	$5,000,000	(4)	(4)	$3,885	$3,885	$366,700
Hotel	468,000	$60,000,000	(4)	(4)	$13,918	$13,918	$881,010
Multi Family	468,000	$60,000,000	(4)	(4)	$29,253	$29,253	$703,170
Industrial	100,000	$4,000,000	(4)	(4)	$4,164	$4,164	$283,400
Clearwater (5)	https://www.myclearwater.com/government/city-departments/planning-development/permitting/fee-estimator						
Office	100,000	$15,000,000	$29,350	included	$26,800	$57,708	$222,600
Commercial	50,000	$5,000,000	$12,850	included	$10,300	$23,883	$103,950
Hotel	468,000	$60,000,000	$103,600	included	$60,016	$167,860	$537,420
Multi Family	468,000	$60,000,000	$103,600	included	$60,016	$167,860	$379,080
Industrial	100,000	$4,000,000	$11,200	included	$8,650	$20,500	$113,700

Notes
1. Calculations for downtown
2. Based on West Shore
3. Based on Suburban Fee. On line calculator did not have multifamily or hotel options. A single family home valued at $128,000 had total permit fees of $33,884
4. Based on cost schedule shown after this table
5. See attached cost schedules

St Petersburg Worksheets

PREPARED [illegible] ESTIMATED FEES LISTING PAGE 1
CITY OF ST. PETERSBURG
PROGRAM EPICOL

DESCRIPTION : NEW OFFICE BLDG
APPLICATION TYPE : OFFICES, BANKS & PROFESSIONAL - NEW
VALUATION : [illegible]
SQUARE FOOTAGE : [illegible]

APPLICATION FEES

FEE DESCRIPTION	AMOUNT	DUE PRIOR TO
FIRE PLAN REVIEW [illegible]	[illegible]	Permit Issuance
FL SURCHARGE DCA	[illegible]	Permit Issuance
FL SURCHARGE DBPR	[illegible]	Permit Issuance
DOWNTOWN REVIEW FEE [illegible]	[illegible]	Permit Issuance
APPLICATION FEE TOTALS	[illegible]	

PERMIT AND PLAN CHECK FEES

PERMIT TYPE	PMT FEE	PLAN CHK FEE
BUILDING PERMIT	[illegible]	[illegible]
ELECTRICAL PERMIT	[illegible]	[illegible]
FLEX - NEW FIRE ALARM [illegible]	[illegible]	[illegible]
MECHANICAL PERMIT	[illegible]	[illegible]
PLUMBING PERMIT/COMMERCIAL	[illegible]	[illegible]
UNDERGROUND UTILITIES PERMIT	[illegible]	[illegible]
COMMERCIAL BLDG FIRE PERMIT	[illegible]	[illegible]
FIRE ALARM	[illegible]	[illegible]
FIRE SPRINKLER PERMIT COMM	[illegible]	[illegible]
PARKING/PAVING PERMIT	[illegible]	[illegible]
PERMIT FEE TOTALS	[illegible]	[illegible]

GRAND TOTALS

APPLICATION FEES	[illegible]
PERMIT FEES	[illegible]
PLAN CHECK FEES	[illegible]
TOTAL	[illegible]

PREPARED [illegible] ESTIMATED FEES LISTING PAGE 1
CITY OF ST. PETERSBURG
PROGRAM EPICOL

DESCRIPTION : NEW COMMERCIAL RETAIL BLDG
APPLICATION TYPE : STORES, PERSONAL SERVICES - NEW
VALUATION : [illegible]
SQUARE FOOTAGE : [illegible]

APPLICATION FEES

FEE DESCRIPTION	AMOUNT	DUE PRIOR TO
[illegible]	[illegible]	Permit Issuance
FIRE PLAN REVIEW [illegible]	[illegible]	Permit Issuance
FL SURCHARGE DCA	[illegible]	Permit Issuance
FL SURCHARGE DBPR	[illegible]	Permit Issuance
DOWNTOWN REVIEW FEE [illegible]	[illegible]	Permit Issuance
APPLICATION FEE TOTALS	[illegible]	

PERMIT AND PLAN CHECK FEES

PERMIT TYPE	PMT FEE	PLAN CHK FEE
BUILDING PERMIT	[illegible]	[illegible]
ELECTRICAL PERMIT	[illegible]	[illegible]
FLEX - NEW FIRE ALARM [illegible]	[illegible]	[illegible]
MECHANICAL PERMIT	[illegible]	[illegible]
PLUMBING PERMIT/COMMERCIAL	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
UNDERGROUND UTILITIES PERMIT	[illegible]	[illegible]
COMMERCIAL BLDG FIRE PERMIT	[illegible]	[illegible]
FIRE ALARM	[illegible]	[illegible]
FIRE SPRINKLER PERMIT COMM	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
PARKING/PAVING PERMIT	[illegible]	[illegible]
PERMIT FEE TOTAL	[illegible]	[illegible]

GRAND TOTALS

APPLICATION FEES	[illegible]
PERMIT FEES	[illegible]
PLAN CHECK FEES	[illegible]
TOTAL	[illegible]

PREPARED 10/07/19, 9:02:45 ESTIMATED FEES LISTING PAGE 1
CITY OF ST. PETERSBURG
PROGRAM BP822L

DESCRIPTION . . . : ESTIMATED PERMIT FEES WAREHOUSE
APPLICATION TYPE . : INDUSTRIAL - NEW
VALUATION . . . . : 4000000
SQUARE FOOTAGE . . : 0

APPLICATION FEES

FEE DESCRIPTION	AMOUNT	DUE PRIOR TO
COMMERCIAL PLAN REVIEW	50.00	Permit Issuance
FL SURCHARGE DCA	484.12	Permit Issuance
FL SURCHARGE DBPR	322.74	Permit Issuance
ZONING REVIEW BLDG 3+COMM	50.00	Permit Issuance
APPLICATION FEE TOTALS	906.86	

PERMIT AND PLAN CHECK FEES

PERMIT TYPE	PMT FEE	PLAN CHK FEE
BUILDING PERMIT	13500.00	2700.00
ELECTRICAL PERMIT	6341.00	1268.20
MECHANICAL PERMIT	3641.00	728.20
PLUMBING PERMIT/COMMERCIAL	626.00	125.20
UNDERGROUND UTILITIES PERMIT	149.00	29.80
COMMERCIAL BLDG FIRE PERMIT	45.00	.00
FIRE ALARM	941.00	.00
FIRE SPRINKLER PERMIT/COMM	203.00	.00
LANDSCAPE PERMIT	176.00	.00
PARKING/PAVING PERMIT	1751.00	.00
PERMIT FEE TOTALS	27373.00	4851.40

GRAND TOTALS

APPLICATION FEES	906.86
PERMIT FEES	27373.00
PLAN CHECK FEES	4851.40
TOTAL	33131.26

PREPARED 10/07/19, 8:55:42 ESTIMATED FEES LISTING PAGE 1
CITY OF ST. PETERSBURG
PROGRAM BP822L

DESCRIPTION . . . : ESTIMATED FEES MULTI-390 UNITS
APPLICATION TYPE . : MULTI FAMILY RESIDENCE, 5 UNITS & OVER - NEW
VALUATION . . . . : 60000000
SQUARE FOOTAGE . . : 0

APPLICATION FEES

FEE DESCRIPTION	AMOUNT	DUE PRIOR TO
FL SURCHARGE DCA	3757.42	Permit Issuance
FL SURCHARGE DBPR	2504.94	Permit Issuance
APPLICATION FEE TOTALS	6262.36	

PERMIT AND PLAN CHECK FEES

PERMIT TYPE	PMT FEE	PLAN CHK FEE
BUILDING PERMIT	134700.00	26940.00
DATA/PHONE LOW VOLTAGE	941.00	188.20
ELECTRICAL PERMIT	28500.00	5700.00
MECHANICAL PERMIT	25200.00	5040.00
PLUMBING PERMIT/COMMERCIAL	4532.00	906.40
UNDERGROUND UTILITIES PERMIT	941.00	188.20
COMMERCIAL BLDG FIRE PERMIT	45.00	.00
FIRE ALARM	933.00	.00
FIRE SPRINKLER PERMIT/COMM	923.00	.00
FIRE SPRINKLER UNDERGROUND COM	12000.00	.00
LANDSCAPE PERMIT	256.00	.00
PARKING/PAVING PERMIT	2651.00	.00
PERMIT FEE TOTALS	211532.00	38962.80

GRAND TOTALS

APPLICATION FEES	6262.36
PERMIT FEES	211532.00
PLAN CHECK FEES	38962.80
TOTAL	256757.16

St. Petersburg/Pinellas County Mobility Fee

(a) Any person who, seeks a certificate of occupancy for land development activity or seeks to change a use by applying for issuance of an occupational license, land use permit, or municipal equivalent thereof which will generate additional traffic shall be required to pay a multimodal impact fee in the manner and amount set forth in this article.

(b) No certificate of occupancy, use permit or occupational license for any activity requiring payment of an impact fee pursuant to Section 150-40 shall be issued unless and until the multimodal impact fee hereby required has been paid.

(c) Any person who has submitted a site plan or building permit application in accordance with local land development codes prior to the effective date of this amendatory ordinance will be subject to the terms of the ordinance that was in effect at the time the site plan or building permit application was submitted.

SECTION 6. SECTION 150-40 OF THE PINELLAS COUNTY LAND DEVELOPMENT CODE IS AMENDED TO READ AS FOLLOWS:

Sec. 150-40. Computation of amount.

(a) The amount of the multimodal impact fees imposed under this article will depend on a number of factors, including the type of land development activity, and several fixed elements, such as the average cost to construct one lane-mile of roadway ($2,216,466.00) and the average capacity of one lane-mile of roadway (6,900 vehicles per day).

(b) The following formula shall be used by the county administrator, city manager or functional equivalent to determine the impact fee per unit of development:

$$\frac{TGR \times \%NT \times TL \times CST\ (RF)}{CAP \times 2}$$

WHERE:

TGR	=	Trip generation rate, as per fee schedule
%NT	=	Percent new trips
TL	=	Average trip length, varies by land use
CST	=	The cost to construct one-lane mile of roadway ($2,216,466.00)
CAP	=	The capacity of one-lane mile of roadway (6,900 vehicles per lane, per day)
2	=	Allocation of one-half the impact to the origin and one-half to the destination
RF	=	Reduction factor (.268)

(c) At the option of the feepayer, the amount of the multimodal impact fee may be determined by the following fee schedules (Schedule A contains the impact fee rates for uses outside of designated downtown areas; Schedule B contains rates for downtown areas):

Schedule A. General Fee Schedule

Land Use Type	Unit	Trip Rate	Avg. Trip Length	Percent New Trips	Fee Per Unit
Residential					
Single-family	du	9.6	5.0	1.00	$2,066
Multi-family	du	6.6	5.0	1.00	$1,420

Page 6

Condominium/Townhome	du	5.8	5.0	1.00	$1,248
Efficiency apt./hotel	room	5.0	3.3	0.59	$419
Mobile home	du	5.0	5.0	1.00	$1,076
Licensed ACLF	bed	2.7	2.8	.74	$241
General Office:					
0—49,999 sq. ft.	1000 sf	16.3	5.1	0.92	$3,292
50,000—149,999 sq. ft	1000 sf	13.7	5.1	0.92	$2,767
150,000—299,999 sq. ft	1000 sf	11.5	5.1	0.92	$2.323
300,000—599,999 sq. ft.	1000 sf	10.4	5.1	0.92	$2,100
600,000—799,999 sq. ft	1000 sf	8.4	5.1	0.92	$1,697
Over 800,000 sq. ft.	1000 sf	8.2	5.1	0.92	$1,656
Research Center:					
Research center	1000 sf	6.1	5.1	0.92	$1,232
Industrial:					
General industrial	1000 sf	7.0	5.1	0.92	$1,414
Industrial park	1000 sf	7.0	5.1	0.92	$1,414
Manufacturing	1000 sf	3.8	5.1	0.92	$767
Warehousing	1000 sf	3.6	5.1	0.92	$727
Mini-warehousing	1000 sf	2.5	3.1	0.92	$307
Medical:					
Hospital	bed	11.8	6.4	0.77	$2,503
Nursing home	bed	2.4	2.8	0.75	$217
Clinic/Medical office	1000 sf	35.2	4.9	0.85	$6,311
Veterinary clinic	1000 sf	32.8	1.9	0.70	$1,878
Lodging:					
Hotel	room	8.2	6.4	0.71	$1,604
Motel (budget style)	room	5.6	6.4	0.59	$910
Resort hotel	room	18.4	5.4	0.75	$3,208
Recreation:					
General recreation	pkg sp	3.4	6.4	0.90	$843
Marina	boat berth	3.0	7.0	0.90	$814
Dry dock marina	boat slip	2.1	3.6	0.90	$293
Racquet club	1000 sf	14	3.0	0.75	$1,356
Golf course	acre	5.0	7.1	0.90	$1,375
Fitness center	1000 sf	27.0	4.0	0.84	$3,905

Page 7

Retail:					
Quality restaurant	1000 sf	90.0	2.5	0.82	$7,942
Sit-down restaurant	1000 sf	127.0	1.9	0.79	$8,205
Drive-in restaurant	1000 sf	496.0	1.7	0.54	$19,599
Quality drive-in restaurant	1000 sf	279.7	1.7	0.75	$15,350
Discount store (ind.)	1000 sf	56.0	1.8	0.61	$2,647
Building materials store	1000 sf	45.2	1.7	0.61	$2,018
Home Improvement Superstore	1000 sf	29.8	2.2	0.83	$2,342
New and used car sales	1000 sf	33.3	2.4	0.79	$2,718
Service station w/ conven. Market <800 sf	pump	162.8	1.9	0.23	$3,062
Car wash	1000 sf	151.2	1.6	0.67	$6,977
Supermarket	1000 sf	102.0	1.7	0.53	$3,956
Convenience market (under 3,000 sf)	store	1762.9	1.5	0.25	$28,456
Convenience market (3,000 sf or over)	1000 sf	887.1	1.5	0.25	$14,319
Movie theater w/ matinee	screen	132.0	2.3	0.85	$11,108
Auto repair/detailing	1000 sf	28.4	2.2	0.83	$2,232
Furniture store	1000 sf	5.1	2.4	0.79	$351
Retail nursery (garden ctr.)	1000 sf	36.0	1.8	0.61	$1,701
Discount club store	1000 sf	41.8	4.0	0.89	$6,405
Discount superstore	1000 sf	65.3	2.2	0.83	$5,133
Video rental store (free standing)	1000 sf	13.6	2.3	0.85	$1,144
General Commercial:					
Under 100,000 sq. ft.	1000 sf	94.7	1.7	0.49	$3,396
100,000—199,999 sq. ft.	1000 sf	74.3	1.8	0.63	$3,627
200,000—299,999 sq. ft.	1000 sf	58.9	2.0	0.75	$3,803
300,000—399,999 sq. ft.	1000 sf	48.3	2.3	0.79	$3,778
400,000—499,999 sq. ft.	1000 sf	43.0	2.5	0.80	$3,702
500,000—999,999 sq. ft.	1000 sf	37.7	3.0	0.81	$3,943
Over 1,000,000 sq. ft.	1000 sf	33.4	3.6	0.81	$4,192
Services:					
Bank	1000 sf	144.0	1.6	0.30	$2,975
Institutional:					
Church	1000 sf	9.1	3.9	0.90	$1,375
Library (private)	1000 sf	56.0	3.9	0.90	$8,461
Day care center	1000 sf	79.0	2.0	0.74	$5,033

Page 8

Elementary school	student	1.3	4.3	0.80	$192
High school	student	1.7	4.3	0.90	$283
Junior/community college	student	1.2	7.3	0.90	$339
University	student	2.4	7.3	0.90	$679
Airport	flights	2.0	6.0	0.90	$465
Park	acres	36.5	6.4	0.90	$9,050

Note: General commercial unit is gross leasable area.

Schedule B. Downtown Area Fee Schedule

Land Use Type	Unit	Trip Rate	Avg. Trip Length	Percent New Trips	Fee Per Unit
Residential:					
Single-family	du	9.6	5.0	0.74	$1,529
Multi-family	du	6.6	5.0	0.74	$972
Condominium/Townhome	du	5.8	5.0	0.74	$924
Efficiency apt./hotel	room	5.0	3.3	0.59	
Mobile home	du	5.0	5.0	0.74	$796
Licensed ACLF	bed	2.7	2.8	0.74	$241
General Office:					
0—49,999 sq. ft.	1000 sf	16.3	5.1	0.74	$2,648
50,000—149,999 sq. ft.	1000 sf	13.7	5.1	0.74	$2,226
150,000—299,999 sq. ft.	1000 sf	11.5	5.1	0.74	$1,868
300,000—599,999 sq. ft.	1000 sf	10.4	5.1	0.74	$1,689
600,000—799,999 sq. ft.	1000 sf	8.4	5.1	0.74	$1,365
Over 800,000 sq. ft.	1000 sf	8.2	5.1	0.74	$1,332
Research Center:					
Research center	1000 sf	6.1	5.1	0.74	$991
Industrial:					
General industrial	1000 sf	7.0	5.1	0.74	$1,137
Industrial park	1000 sf	7.0	5.1	0.74	$1,137
Manufacturing	1000 sf	3.8	5.1	0.74	$617
Warehousing	1000 sf	3.6	5.1	0.74	$585
Mini-warehousing	1000 sf	2.5	3.1	0.74	$247
Medical:					
Hospital	bed	11.8	6.4	0.62	$2,015

Page 9

Nursing home	bed	2.4	2.8	0.60	$174
Clinic/Medical office	1000 sf	35.2	4.9	0.70	$5,197
Veterinary clinic	1000 sf	32.8	1.9	0.70	$1,878
Lodging:					
Hotel	room	8.2	6.4	0.61	$1,378
Motel (budget style)	room	5.6	4.0	0.61	$588
Resort hotel	room	18.4	5.4	0.61	$2,609
Recreation:					
General recreation	pkg sp	3.4	6.4	0.32	$300
Marina	boat berth	3.0	7.0	0.32	$289
Dry dock marina	boat slip	2.1	3.6	0.32	$104
Racquet club	1000 sf	14	3.0	0.32	$579
Fitness center	1000 sf	27.0	4.0	0.36	$1,674
Retail:					
Quality restaurant	1000 sf	90.0	2.5	0.21	$2,034
Sit-down restaurant	1000 sf	127.0	1.9	0.21	$2,181
Drive-in restaurant	1000 sf	496.0	1.7	0.21	$7,622
Quality drive-in restaurant	1000 sf	279.7	1.7	0.21	$4,298
Discount store (ind.)	1000 sf	56.0	1.8	0.34	$1,475
Building materials store	1000 sf	45.2	1.7	0.34	$1,125
Home Improvement Superstore	1000 sf	29.8	2.2	0.34	$959
New and used car sales	1000 sf	33.3	2.4	0.52	$1,789
Service station w/ conven. market <800 sf	pump	162.8	1.9	0.23	$3,062
Car wash	1000 sf	151.2	1.6	0.40	$4,165
Supermarket	1000 sf	102.0	1.7	0.53	$3,956
Convenience market (under 3,000 sf)	store	1762.9	1.5	0.25	$28,456
Convenience market (3,000 sf or over)	1000 sf	887.1	1.5	0.25	$14,319
Movie theater w/ matinee	screen	132.0	2.3	0.58	$7,580
Auto repair/detailing	1000 sf	28.4	2.2	0.56	$1,506
Furniture store	1000 sf	5.1	2.4	0.52	$231
Retail nursery (garden ctr.)	1000 sf	36.0	1.8	0.34	$948
Discount club store	1000 sf	41.8	4.0	0.30	$2,159
Discount superstore	1000 sf	65.3	2.2	0.30	$1,855
Video rental store (free standing)	1000 sf	13.6	2.3	0.32	$431
General Commercial:					

Page 10

Under 100,000 sq. ft.	1000 sf	94.7	1.7	0.30	$2,079
100,000—199,999 sq. ft.	1000 sf	74.3	1.8	0.35	$2,015
200,000—299,999 sq. ft.	1000 sf	58.9	2.0	0.47	$2,383
300,000—399,999 sq. ft.	1000 sf	48.3	2.3	0.51	$2,439
400,000—499,999 sq. ft.	1000 sf	43.0	2.5	0.53	$2,452
500,000—999,999 sq. ft.	1000 sf	37.7	3.0	0.54	$2,629
Over 1,000,000 sq. ft.	1000 sf	33.4	3.6	0.54	$2,795
Services:					
Bank	1000 sf	144.0	1.6	0.30	$2,975
Institutional:					
Church	1000 sf	9.1	3.9	0.35	$535
Library (private)	1000 sf	56.0	3.9	0.63	$5,923
Day care center	1000 sf	79.0	2.0	0.47	$3,196
Elementary school	student	1.3	4.3	0.53	$128
High school	student	1.7	4.3	0.63	$198
Junior/community college	student	1.2	7.3	0.63	$238
University	student	2.4	7.3	0.63	$475
Park	acre	36.5	6.4	0.63	$6,335

Note: General commercial unit is gross leasable area.

The Downtown Area fee schedule applies to existing downtown areas geographically depicted in the attached maps including Exhibit A: Multimodal Impact Fee Districts, Exhibit B: Tarpon Springs Downtown Area District 1A; Exhibit C: Oldsmar Downtown Area District 2A; Exhibit D: Palm Harbor Downtown Area District 3A; Exhibit E: Dunedin Downtown Area District 4A; Exhibit F: Safety Harbor Downtown Area District 5A; Exhibit G: Clearwater Downtown Area District 6A; Exhibit H: Largo Downtown Area District 7A; Exhibit I: Pinellas Park Downtown Area District 10A; and Exhibit J: St. Petersburg Downtown Area District 11A. The 1990 MPO Pinellas County Transportation Impact Fee Study contains technical data indicating there are significantly fewer new vehicle trips generated for each unit of development in these areas as compared to similar land uses outside them. These areas are delineated in locally adopted redevelopment or comprehensive plans with supporting policies designed to encourage infill and redevelopment activity. New areas with similar trip generation characteristics, as described in the 1990 MPO Pinellas County Transportation Impact Fee Study, may be added to the attached exhibits through the amendment of the ordinance pursuant to the submittal of a detailed map and documentation that such areas meet the criteria in the 1990 Pinellas County MPO Transportation Impact Fee Study.

In the case of a change of use, redevelopment, or modification of an existing use, the impact fee shall be based upon the net increase in the impact fee for the new use as compared to the impact fee for the highest previous use in existence on or after the effective date of the ordinance from which this section derives. The county administrator or city manager shall be guided in this determination by the county's transportation impact fee study (February 1990), independent study trip generation data or the Institute of Transportation Engineers' Trip Generation, sixth (or successor) edition.

(d) If a feepayer shall opt not to have the impact fee determined according to Subsections (b) and (c) of this section, then the feepayer shall prepare and submit to the county administrator, city manager or functional

Page 11

TAMPA DEVELOPER AND MOBILITY FEES

Tampa Construction Permit Fee
Office 100, 000 SF

Please select the 'Project Type' to proceed.

Project Type: ○ Residential ◉ Commercial

Project Category: NEW COMPLETE CONSTRUCTION FEE

Occupancy Class: Business-Professional Office

Construction Type: 1A

Square Footage: 100000

Estimate Fees Reset

Estimated Plan Review Cost: $ 6,284.07

Estimated Remaining Cost: $ 9,426.11

Estimated Permit Fee:$15,710.18

Please select the 'Project Type' to proceed.

Project Type: ○ Residential ◉ Commercial

Project Category: NEW COMPLETE CONSTRUCTION FEE

Occupancy Class: Business-High Rise Office

Construction Type: 1A

Square Footage: 100000

Estimate Fees Reset

Estimated Plan Review Cost: $ 8,206.15

Estimated Remaining Cost: $ 12,309.23

Estimated Permit Fee:$20,515.38

Please select the 'Project Type' to proceed.

Project Type: ○ Residential ◉ Commercial

Project Category: NEW COMPLETE CONSTRUCTION FEE

Occupancy Class: Factory Industrial-Low Hazard

Construction Type: 1B

Square Footage: 100000

Estimate Fees Reset

Estimated Plan Review Cost: $ 6,512.03

Estimated Remaining Cost: $ 9,768.05

Estimated Permit Fee:$16,280.08

TAMPA MOBILITY FEE

EXHIBIT - CITY OF TAMPA MULTI-MODAL TRANSPORTATION IMPACT FEE DISTRICT SCHEDULE

	Unit	Central Business District	Central East District	Interbay District	North Central District	University North District	Westshore District
Residential							
Single Family Detached							
Under 1,500 S.F.	du	$716	$1,259	$1,280	$1,308	$1,632	$2,077
1,500—2,499	du	$955	$1,677	$1,707	$1,744	$2,176	$2,773
2,500—S.F. & Over	du	$1,127	$1,979	$2,014	$1,586	$2,568	$3,283
Single Family Semi-Detached	du	$726	$1,274	$1,297	$1,327	$1,654	$2,105
Mobile Home	du	$447	$794	$808	$640	$1,036	$1,337
Multi-Family 1—2 Stories	du	$485	$889	$873	$694	$1,122	$1,469
Multi-Family 3 Stories And Over	du	$373	$662	$672	$533	$865	$1,114
ALF/Retirement Home	du	$252	$480	$474	$370	$597	$796
Lodging							
Hotel/Motel	room	$1,574	$1,453	$1,417	$1,196	$1,754	$2,299
Industrial							
General Light Industrial	1000 s.f.	$1,888	$1,118	$1,106	$918	$1,481	$1,833
General Heavy Industrial	1000 s.f.	$523	$326	$317	$250	$404	$499
Warehouse	1000 s.f.	$1,676	$997	$1,037	$818	$1,319	$1,631
Mini-Warehouse	1000 s.f.	$953	$570	$593	$487	$754	$932
Utilities	employee	$229	$148	$148	$117	$188	$235
Medical							
Nursing Home	bed	$859	$360	$360	$326	$490	$732
Hospital	bed	$1,273	$2,338	$2,413	$1,503	$2,069	$3,793
Office							
Under 100,000 S.F.	1000 s.f.	$6,056	$3,601	$3,716	$2,954	$4,765	$5,890
100,000—199,999 S.F.	1000 s.f.	$4,891	$2,909	$3,026	$2,387	$3,949	$4,759
200,000 S.F. And Over	1000 s.f.	$2,729	$2,216	$2,307	$1,819	$3,014	$3,627
Research Facility	1000 s.f.	$1,613	$1,375	$1,128	$895	$1,427	$1,764
Retail							
Convenience	1000 s.f.	$4,024	$3,271	$4,067	$3,199	$4,193	$5,654
Under 50,000 S.F.	1000 s.f.	$2,853	$2,823	$2,979	$2,272	$3,582	$5,408
50,000—99,999 S.F.	1000 s.f.	$3,439	$3,472	$3,662	$2,624	$3,761	$6,532
100,000—199,999 S.F.	1000 s.f.	$3,586	$3,693	$3,994	$2,513	$3,999	$6,865
200,000—299,999 S.F.	1000 s.f.	$3,768	$3,729	$3,765	$3,217	$4,619	$7,055
300,000—399,999 S.F.	1000 s.f.	$3,684	$3,759	$3,702	$3,140	$4,998	$7,237
400,000—599,999 S.F.	1000 s.f.	$3,684	$3,337	$3,236	$2,790	$4,457	$6,399
600,000 S.F. & Over	1000 s.f.	$3,528	$3,359	$3,315	$2,557	$4,067	$5,865
Wholesale	1000 s.f.	$693	$501	$787	$673	$1,066	$1,537
Furniture	1000 s.f.	$70	$84	$82	$70	$1,1[illegible]	$1,6[illegible]
Hardware/Paint Store	1000 s.f.	$1,922	$1,801	$1,964	$1,360	$2,219	$3,505
Restaurant							
Restaurant	1000 s.f.	$2,145	$1,978	$1,196	$2,997	$4,310	$7,468
Fast Food Style Drive Thru	1000 s.f.	$3,734	$5,505	$5,878	$3,284	$5,769	$10,430
Services							
Bank	1000 s.f.	$7,069	$5,105	$5,385	$5,816	$5,533	$9,643
Bank With Drive Thru	1000 s.f.	$7,465	$6,800	$6,118	$4,535	$6,286	$10,355
Savings & Loans	1000 s.f.	$2,530	$1,843	$1,946	$1,377	$1,997	$3,481
Pharmacy	1000 s.f.	$1,934	$2,342	$2,434	$1,917	$2,296	$3,887
Day Care Center	1000 s.f.	$2,566	$2,862	$3,375	$2,310	$4,181	$4,207
Service Station/Car Wash	1000 s.f.	$23,133	$5,351	$5,560	$2,337	$5,920	$10,275
Recreation							
General Recreation	parking space	$435	$547	$605	$471	$762	$951
Golf Course	parking space	$2,257	$3,003	$2,315	$2,025	$2,303	$1,625
Marina	slip	$1,278	$918	$1,8[illegible]	$459	$737	$922
Racquet Club/Health Club	1000 s.f.	$1,009	$1,494	$1,419	$1,123	$1,559	$2,652
Institutional							
Elementary School	student	$375	$156	$157	$113	$195	$252
Jr. High/Middle School	student	$375	$156	$157	$113	$195	$252
High School	student	$169	$219	$219	$165	$270	$353
Junior Technical College	student	$336	$255	$251	$128	$509	$[illegible]
College	student	$375	$175	$171	$132	$[illegible]	$605
Church	1000 s.f.	$761	$1,203	$1,207	$926	$1,480	$1,942
General Aviation	flight	$1,415	$622	$613	$521	$831	$1,028
Civic Center	1000 s.f.	$11,353	$5,586	$5,291	$4,175	$6,750	$8,319

PINELLAS COUNTY DEVELOPER AND MOBILITY FEES

Pinellas Calculator

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	10 ,000.00 Dollars
Area of Construction	50000 Square Feet
Occupancy Type	Commercial - Office
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	33379.50
BLDG Code Plan Review	11126.50
FL BLDG Permit Surcharge	1335.18
Zoning Fee	66.00
Total	45907.18

Reset Recalculate

Do I? News | Media | SHARE | October 3, 2019

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	100 ,000.00 Dollars
Area of Construction	100000 Square Feet
Occupancy Type	Commercial - Office
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	66009.00
BLDG Code Plan Review	22003.00
FL BLDG Permit Surcharge	2640.36
Zoning Fee	66.00
Total	90718.36

Reset Recalculate

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	50 ,000.00 Dollars
Area of Construction	100000 Square Feet
Occupancy Type	Commercial - Office
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	66009.00
BLDG Code Plan Review	22003.00
FL BLDG Permit Surcharge	2640.36
Zoning Fee	66.00
Total	90718.36

Reset Recalculate

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Residential
Construction Estimate	50 ,000.00 Dollars
Conditioned Area	50000 Square Feet
Unconditioned Area	0 Square Feet
Area of Construction	50000 Square Feet
Occupancy Type	Residential (1 or 2 Family)
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	35152.24
BLDG Code Plan Review	11717.41
FL BLDG Permit Surcharge	1406.09
Zoning Fee	66.00
Total	48341.74

Reset Recalculate

Disclaimer: This is a "one-size fits most" self-service tool to get a rough idea of building permit fees.

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Residential	
Construction Estimate	50	,000.00 Dollars
Conditioned Area	10000	Square Feet
Unconditioned Area	0	Square Feet
Area of Construction	10000	Square Feet
Occupancy Type	Residential (1 or 2 Family)	
Construction Type	All Block Exterior Walls	
New or Existing	H1 New	
Building Permit	8186.14	
BLDG Code Plan Review	2728.71	
FL BLDG Permit Surcharge	327.45	
Zoning Fee	66.00	
Total	11308.30	

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial	
Construction Estimate	50	,000.00 Dollars
Area of Construction	100000	Square Feet
Occupancy Type	Commercial - Retail	
Construction Type	All Block Exterior Walls	
New or Existing	H1 New	
Building Permit	48499.50	
BLDG Code Plan Review	16166.50	
FL BLDG Permit Surcharge	1939.98	
Zoning Fee	66.00	
Total	66671.98	

Reset Recalculate

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	50 ,000.00 Dollars
Area of Construction	50000 Square Feet
Occupancy Type	Commercial - Retail
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	24624.75
BLDG Code Plan Review	8208.25
FL BLDG Permit Surcharge	984.99
Zoning Fee	66.00
Total	33883.99

Reset Recalculate

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	50 ,000.00 Dollars
Area of Construction	50000 Square Feet
Occupancy Type	Commercial - Warehouse
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	17589.00
BLDG Code Plan Review	5863.00
FL BLDG Permit Surcharge	703.56
Zoning Fee	66.00
Total	24221.56

Reset Recalculate

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	2 ,000.00 Dollars
Area of Construction	100000 Square Feet
Occupancy Type	Commercial - Warehouse
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	34428.00
BLDG Code Plan Review	11476.00
FL BLDG Permit Surcharge	1377.12
Zoning Fee	66.00
Total	47347.12

Reset Recalculate

Pinellas County Building Permit Fee Calculator

Calculations effective October 15, 2017

Residential or Commercial	Commercial
Construction Estimate	10 ,000.00 Dollars
Area of Construction	100000 Square Feet
Occupancy Type	Commercial - Office
Construction Type	All Block Exterior Walls
New or Existing	H1 New
Building Permit	66009.00
BLDG Code Plan Review	22003.00
FL BLDG Permit Surcharge	2640.36
Zoning Fee	66.00
Total	90718.36

Reset Recalculate

MOBILITY FEE

(SEE ST. PETERSBURG/PINELLAS COUNTY)

CLEARWATER DEVELOPER AND MOBILITY FEES

Fee Estimator | City of Clearwater, FL

Page 2 of 2

Type Of Permit: New Commercial

Type Of Property: ○ Residential ◉ Commercial

Value Of Job: 15000000

Trades Included:
- ☑ Building
- ☑ Electric
- ☑ Roof
- ☑ Mechanic
- ☑ Plumbing
- ☑ Gas

Estimated Fees

Review Fee: $26,800.00
Permit Fee: $29,350.00
Trades Fee: $150.00
State Fee: $1,407.50

Total: $57,707.50

Submit | Reset

Click here to view the schedule of fees, rates and charges.

*** State Fee includes *Fl Building Commission* and *Fl Building Code Administration and Inspectors Board*. They are 3% of the Permit Fees, Plans Fee and Trades Fee or a minimum of $2.**

Disclaimer: The above fee estimate does not include other fees such as impact fees, fire fees, right-of-way, tree removal and clearing and grubbing fees, some of which could be substantial. For information concerning fire fees please call 727-562-4327 and for more information on other fees please call 727-562-4567. The City of Clearwater assumes no liability for any errors, omissions, or inaccuracies in the information provided.

https://www.myclearwater.com/government/city-departments/planning-development/per... 10/11/2019

Fee Estimator | City of Clearwater, FL

Page 2 of 2

Type Of Permit: New Commercial

Type Of Property: ○ Residential ◉ Commercial

Value Of Job: 5000000

Trades Included:
- ☑ Building
- ☑ Electric
- ☑ Roof
- ☑ Mechanic
- ☑ Plumbing
- ☑ Gas

Estimated Fees

Review Fee: $10,300.00
Permit Fee: $12,850.00
Trades Fee: $150.00
State Fee: $582.50

Total: $23,882.50

Submit | Reset

Click here to view the schedule of fees, rates and charges.

* State Fee includes *Fl Building Commission* and *Fl Building Code Administration and Inspectors Board*. They are 3% of the Permit Fees, Plans Fee and Trades Fee or a minimum of $2.

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https://www.myclearwater.com/government/city-departments/planning-development/per... 10/11/2019

(f) Permit fees.

1. Per structure, based on construction valuation of:
   - a. $100,000.00 or less 33.00
     - Plus, per $1,000.00 or value or fraction thereof 7.25
   - b. Greater than 100,000.00 but not exceeding $500,000.00 ..... 700.00
     - Plus, per $1,000.00 of value or fraction thereof 6.15
   - c. Greater than $500,000.00 but not exceeding $1,000,000.00 ..... 2,940.00
     - Plus, per $1,000.00 of value or fraction thereof 3.90
   - d. Greater than $1,000,000.00 ..... 4,600.00
     - Plus, per $1,000.00 of value or fraction thereof 1.65
2. This fee applies to all types of permits, with additional costs of $30.00 per trade or permit type for combination permits. Exception: No additional fees for swimming pools.

(g) Miscellaneous permits:

1. Mobile home, mobile office, construction trailer, sales trailer, etc.
   - a. Building permit (tie-down and site placement) 37.00
   - b. Electric permit 37.00
   - c. Gas permit 37.00
   - d. Plumbing permit 37.00
   - e. Mechanical permit 37.00
2. Temporary power pole, not in conjunction with combination permit 37.00
3. Tent permit (may require electric) up to 20 ft x 40 ft 45.00
   - Tent permit (may require electric) greater than 20 ft x 40 ft 55.00
   - Tent permits for neighborhood events held by neighborhood associations, community based organizations and not for-profit organizations, as approved by the Neighborhood Services Division 40.00
4. Demolition permit 53.00
   - Plus, per square foot in excess of 1,000 square feet 0.10
   - Maximum total demolition permit fee 1,000.00
5. House move:
   - a. Application 53.00
   - b. Pre-inspection 53.00
     - Plus, per mile outside city 0.30
   - c. Remodeling permit, for setting house on lot, see sub paragraph (2) (f) permit fees
6. Swimming pool permit, aboveground pool (for all work involved) 37.00
7. Zoning verification letter, per letter 25.00
8. Project research, per hour (not to exceed eight hours without Commission approval 26.00

(h) Building Official may assess special fees per written policy for:

1. Work not ready for inspection (reinspection fee)
   - a. First occurrence 32.00
   - b. Second or subsequent occurrence 80.00
2. Follow up on permit
   - a. Failure to request inspections ..... 50% of permit fee
   - b. Minimum fee 37.00
3. After-the-fact permit
   - a. First occurrence ..... Triple permit fee
   - b. Second or subsequent occurrence by the same contractor, any job site in city ..... 10 times permit fee
4. Filing service fee, for notice of commencement (this is in addition to county clerk's charges) 10.00
5. *Expired permit holder's fee 200.00

*A $200 fee is to be charged to holders of expired permits. This fee may be refunded upon completion of all requirements to "close out" the permit through final inspections.

(i) Permit extensions:

1. Permit expired:
   - A. Less than 30 days ..... No fee
   - B. More than 30 days, but less than 90 days 30.00
   - C. More than 90 days (fee based in value of work to be completed) ..... New permit fee
2. Exception, if only finals are needed 30.00

(3) As used in this fee schedule, "combination permit" means a permit for construction privileges, conditions and restrictions for two or more trades or permit types, for which proper approval has been granted by the city and for which proper fees have been paid.

Filing fees for appeals:

(1) Appeal to the construction/flood board of adjustment and appeals 130.00
(2) Appeal to the city manager 55.00
(3) Appeal to the city commission 55.00

Updated 09.06.2016

2

Type Of Permit: New Multi-Family Dwelling

Type Of Property: ◉ Residential ○ Commercial

Value Of Job: 60000000

Trades Included:
- ☑ Building
- ☑ Electric
- ☑ Roof
- ☑ Mechanic
- ☑ Plumbing
- ☑ Gas

Estimated Fees

Review Fee: $60,016.00
Permit Fee: $103,600.00
Trades Fee: $150.00
State Fee: $4,094.15

Total: $167,860.15

Submit | Reset

Click here to view the schedule of fees, rates and charges.

*** State Fee includes *Fl Building Commission* and *Fl Building Code Administration and Inspectors Board*. They are 3% of the Permit Fees, Plans Fee and Trades Fee or a minimum of $2.**

Disclaimer: The above fee estimate does not include other fees such as impact fees, fire fees, right-of-way, tree removal and clearing and grubbing fees, some of which could be substantial. For information concerning fire fees please call 727-562-4327 and for more information on other fees please call 727-562-4567. The City of Clearwater assumes no liability for any errors, omissions, or inaccuracies in the information provided.

Type Of Permit: New Commercial

Type Of Property: ○ Residential ◉ Commercial

Value Of Job: 4000000

Trades Included:
- ☑ Building
- ☑ Electric
- ☑ Roof
- ☑ Mechanic
- ☑ Plumbing
- ☑ Gas

Estimated Fees
Review Fee: $8,650.00 **Permit Fee: $11,200.00** **Trades Fee: $150.00** **State Fee: $500.00**
Total: $20,500.00

Submit | Reset

Click here to view the schedule of fees, rates and charges.

*** State Fee includes *Fl Building Commission* and *Fl Building Code Administration and Inspectors Board*. They are 3% of the Permit Fees, Plans Fee and Trades Fee or a minimum of $2.**

Disclaimer: The above fee estimate does not include other fees such as impact fees, fire fees, right-of-way, tree removal and clearing and grubbing fees, some of which could be substantial. For information concerning fire fees please call 727-562-4327 and for more information on other fees please call 727-562-4567. The City of Clearwater assumes no liability for any errors, omissions, or inaccuracies in the information provided.

Planning & Development Department
100 S. Myrtle Avenue, Suite 210
Clearwater, FL 33756
Telephone: (727) 562-4567
www.myclearwater.com

SCHEDULE OF FEES, RATES AND CHARGES
BUILDING REGULATIONS
Permit fees and charges

(1) Permit fees and charges, in general, exceptions:

(a) Permits are generally not required for carpeting, painting, wallpapering, paneling over existing walls, and tile nor where the valuation of labor, materials, and all other items not exceeding $500.00 and the work or operation is of casual, minor, inconsequential nature, and does not violate any city codes or ordinances, or is exempt pursuant to Chapter 75-489, Laws of Florida (Special Acts), Section 25.

(b) Valuation for all construction shall be based on the contract value. The current Southern Building Code Congress International's valuation tables may be used if no contract is submitted with the permit application.

(c) Plans review fees will be reduced by 33 percent for those projects using a private provider of plan review services, pursuant to Florida statutes, to review the building, plumbing, mechanical and electrical trades.

(d) Where no permit fee is stated, the same shall not be interpreted as an intention to waive any requirement for a permit or fees for a permit that may be stated elsewhere in the city's Code of Ordinances.

(e) Prior to starting any electrical, gas, plumbing, mechanical, roofing, or other work under a combination permit, the contractor or the subcontractor engaged to do the work shall file with Development Services a form showing the name and certification number of the subcontractor, the subcontractor's occupational license number, the combination permit number, the job address and other related information as may be required by Development Services. Failure to file such form or provide such information shall be cause for the refusal of inspection services, and the issuance of a correction notice with the appropriate fee.

(2) Fee schedule. In the case of reviews, inspections and similar activities associated with building and related codes requiring a permit, the following schedule of fees shall apply:

(a) Plans examination fee:
1. Multifamily and commercial, based on construction valuation of:
   a. $100,000.00 or less 44.00
      Plus, per $1,000.00 of value or fraction thereof 3.90
   b. Greater than 100,000.00 but not exceeding 500,000.00 ..... 380.00
      Plus, per $1,000.00 of value or fraction thereof 2.80
   c. Greater than 500,000.00 but not exceeding 1,000,000.00 ..... 1,275.00
      Plus, per $1,000.00 of value or fraction thereof 2.25
   d. Greater than 1,000,000.00 ..... 2,050.00
      Plus, per $1000.00 of value or fraction thereof 1.65
2. One or two-family residential projects 16.00
   Plus, per $1,000.00 of value or fraction thereof 1.00

(b) Plan amendments, Residential, multifamily and commercial projects:
1. Change to permitted plans, per hour 53.00
2. Duplicate permit placards, each 16.00
3. Change of contractor, per contractor 26.00
4. Review replacement plans, per hour 53.00
5. Field reviewed plan amendment 26.00

(c) Certificates of occupancy:
1. One- or two-family dwelling, per unit 11.00
2. Multifamily and commercial, per application 26.00
3. Conditional certificate of occupancy, per condition 32.00
4. Replacement or additional copy:
   a. One or two-family dwelling, per unit 11.00
   b. Multifamily and commercial 26.00

(d) Special inspections:
1. Change of use or certificate of occupancy inspection per trade 37.00
   Maximum fee 74.00
2. After hours or weekends, per hour, per inspection 53.00
   Minimum fee, per inspection 100.00

(e) Refunds:
1. Permits under $40.00, unless issued in error by city ..... No refund
2. Work has commenced, or permit is over 90 days old ..... No refund
3. All other permits ..... Refund of fee paid, less $40.00

1

(f) Permit fees:

1. Per structure, based on construction valuation of:
   - a. $100,000.00 or less 33.00
     Plus, per $1,000.00 or value or fraction thereof 7.25
   - b. Greater than 100,000.00 but not exceeding $500,000.00 ..... 700.00
     Plus, per $1,000.00 of value or fraction thereof 6.15
   - c. Greater than $500,000.00 but not exceeding $1,000,000.00 ..... 2,940.00
     Plus, per $1,000.00 of value or fraction thereof 3.90
   - d. Greater than $1,000,000.00 ..... 4,600.00
     Plus, per $1,000.00 of value or fraction thereof 1.65
2. This fee applies to all types of permits, with additional costs of $30.00 per trade or permit type for combination permits. Exception: No additional fees for swimming pools.

(g) Miscellaneous permits:

1. Mobile home, mobile office, construction trailer, sales trailer, etc.
   - a. Building permit (tie-down and site placement) 37.00
   - b. Electric permit 37.00
   - c. Gas permit 37.00
   - d. Plumbing permit 37.00
   - e. Mechanical permit 37.00
2. Temporary power pole, not in conjunction with combination permit 37.00
3. Tent permit (may require electric) up to 20 ft x 40 ft 45.00
   Tent permit (may require electric) greater than 20 ft x 40 ft 55.00
   Tent permits for neighborhood events held by neighborhood associations, community based organizations and not-for-profit organizations, as approved by the Neighborhood Services Division 40.00
4. Demolition permit 53.00
   Plus, per square foot in excess of 1,000 square feet 0.10
   Maximum total demolition permit fee 1,000.00
5. House move
   - a. Application 53.00
   - b. Pre-inspection 53.00
     Plus, per mile outside city 0.30
   - c. Remodeling permit, for setting house on lot, see sub paragraph (2) (f) permit fees
6. Swimming pool permit, aboveground pool (for all work involved) 37.00
7. Zoning verification letter, per letter 25.00
8. Project research, per hour (not to exceed eight hours without Commission approval) 26.00

(h) Building Official may assess special fees per written policy for:

1. Work not ready for inspection (reinspection fee)
   - a. First occurrence 32.00
   - b. Second or subsequent occurrence 80.00
2. Follow up on permit
   - a. Failure to request inspections ..... 50% of permit fee
   - b. Minimum fee 37.00
3. After-the-fact permit
   - a. First occurrence ..... Triple permit fee
   - b. Second or subsequent occurrence by the same contractor, any job site in city ..... 10 times permit fee
4. Filing service fee, for notice of commencement (this is in addition to county clerk's charges) 10.00
5. *Expired permit holder's fee 200.00

*A $200 fee is to be charged to holders of expired permits. This fee may be refunded upon completion of all requirements to "close out" the permit through final inspections.

(i) Permit extensions:

1. Permit expired
   - A. Less than 30 days ..... No fee
   - B. More than 30 days, but less than 90 days 30.00
   - C. More than 90 days (fee based in value of work to be completed) ..... New permit fee
2. Exception: if only finals are needed 30.00

(3) As used in this fee schedule, "combination permit" means a permit for construction privileges, conditions and restrictions for two or more trades or permit types, for which proper approval has been granted by the city and for which proper fees have been paid.

Filing fees for appeals:

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(2) Appeal to the city manager 55.00
(3) Appeal to the city commission 55.00

Updated 09 06 2016

2

MOBILITY FEE
(See St. Petersburg's Mobility Fees

HILLSBOROUGH COUNTY DEVELOPER AND MOBILITY FEES

Hillsborough County, Florida
Schedule of New Construction Fees (Plan Check & Inspection Combined)
(All Construction Types)
Appendix I

		FBC Construction Types: I A, I B			FBC Construction Types: II A, III A, IV, VA		FBC Construction Types: II B, III B, V B	
FBC Class	FBC Occupancy Type	Project Size Threshold	Base Cost@ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *
A-1	Large Assembly							
-		2,500	$2,949	$41.40	$2,458	$34.50	$1,966	$27.60
-		5,000	$3,984	$16.08	$3,320	$13.40	$2,656	$10.72
-		10,000	$4,788	$14.04	$3,990	$11.70	$3,192	$9.36
-		25,000	$6,894	$7.06	$5,745	$5.88	$4,596	$4.70
-		50,000	$8,658	$17.32	$7,215	$14.43	$5,772	$11.54
A-2	Rest/Club/Bar							
-		1,250	$2,127	$83.04	$1,773	$69.20	$1,418	$55.36
-		2,500	$3,165	$29.08	$2,638	$24.22	$2,110	$19.30
-		5,000	$3,892	$19.55	$3,243	$16.29	$2,594	$13.03
-		12,500	$5,358	$4.75	$4,465	$3.96	$3,572	$3.17
-								
A-3	Small Assembly Buildings							
-	Including Church educational <100	2,500	$3,635	$50.73	$3,029	$42.28	$2,423	$33.82
-		5,000	$4,903	$19.73	$4,088	$16.44	$3,269	$13.15
-		10,000	$5,869	$17.29	$4,908	$14.41	$3,926	$11.53
-		25,000	$8,483	$8.64	$7,069	$7.20	$5,655	$5.76
-								
A	Tenant Improvements							
-		1,250	$2,664	$74.98	$2,220	$62.48	$1,776	$49.98
-		2,500	$3,601	$29.09	$3,001	$24.24	$2,401	$19.39
-		5,000	$4,328	$25.37	$3,607	$21.14	$2,886	$16.91
-		12,500	$6,231	$12.74	$5,193	$10.62	$4,154	$8.50
-		25,000	$7,824	$31.30	$6,520	$26.08	$5,216	$20.86
B	Banks	2,500	$4,223	$5.03	$3,519	$4.10	$2,815	$3.35
-		12,500	$4,725	$14.04	$3,938	$11.70	$3,150	$9.36
-		25,000	$6,480	$5.34	$5,400	$4.45	$4,320	$3.56
-		50,000	$7,815	$4.53	$6,513	$3.78	$5,210	$3.02
-		125,000	$11,213	$2.34	$9,344	$1.95	$7,475	$1.50
-		250,000	$14,138	$5.66	$11,781	$4.71	$9,425	$3.77
B	Offices	1,000	$2,592	$7.75	$2,160	$6.46	$1,728	$5.17
-		5,000	$2,902	$24.65	$2,418	$20.54	$1,935	$16.43
-		10,000	$4,134	$8.85	$3,445	$7.38	$2,756	$5.90
-		20,000	$5,019	$7.05	$4,183	$5.87	$3,346	$4.70
-		50,000	$7,133	$4.01	$5,944	$3.34	$4,755	$2.67
-		100,000	$9,135	$9.14	$7,613	$7.61	$6,090	$6.09
B	B Occupancy Tenant Improvements	2,000	$4,094	$6.08	$3,412	$5.07	$2,730	$4.06
-		10,000	$4,581	$16.79	$3,818	$13.98	$3,054	$10.60
-		20,000	$6,210	$6.30	$5,175	$5.25	$4,140	$4.20
-		40,000	$7,470	$5.45	$6,225	$4.54	$4,980	$3.63
-		100,000	$10,740	$2.74	$8,950	$2.30	$7,160	$1.84
-		200,000	$13,500	$6.75	$11,250	$5.63	$9,000	$4.50

Hillsborough County, Florida
Schedule of New Construction Fees (Plan Check & Inspection Combined)
(All Construction Types)
Appendix I

		FBC Construction Types: I A, I B			FBC Construction Types: II A, III A, IV, VA		FBC Construction Types: II B, III B, V B	
FBC Class	FBC Occupancy Type	Project Size Threshold	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *
R-2.4	Group Care (5+, <16)							
.		2,500	$1,453	$8.88	$1,211	$7.40	$969	$5.92
.		5,000	$1,675	$13.54	$1,396	$11.28	$1,117	$9.02
.		10,000	$2,352	$4.84	$1,960	$4.03	$1,568	$3.23
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R	R Occupancy Tenant Improvements							
.		400	$1,392	$6.16	$1,160	$5.13	$928	$4.10
.		800	$1,416	$4.62	$1,180	$3.85	$944	$3.08
.		1,600	$1,453	$8.21	$1,211	$6.84	$969	$5.47
.		4,000	$1,650	$8.02	$1,375	$6.68	$1,100	$5.34
.		8,000	$1,971	$24.64	$1,642	$20.53	$1,314	$16.42
S-1	Moderate Hazard Storage	5,000	$5,524	$3.30	$4,603	$2.75	$3,683	$2.20
.		25,000	$6,184	$9.56	$5,153	$7.96	$4,123	$6.37
.		50,000	$8,573	$3.56	$7,144	$2.96	$5,715	$2.37
.		100,000	$10,350	$2.98	$8,625	$2.48	$6,900	$1.98
.		250,000	$14,813	$1.58	$12,344	$1.31	$9,875	$1.05
.		500,000	$18,750	$3.75	$15,625	$3.13	$12,500	$2.50
S-1	Other Mod Hazard Storage	1,000	$3,405	$10.16	$2,838	$8.47	$2,270	$6.77
.		5,000	$3,812	$29.56	$3,177	$24.63	$2,541	$19.70
.		10,000	$5,290	$11.02	$4,408	$9.18	$3,526	$7.34
.		20,000	$6,391	$9.18	$5,326	$7.65	$4,261	$6.12
.		50,000	$9,144	$4.90	$7,620	$4.08	$6,096	$3.26
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S-2	Low Hazard Storage	2,000	$1,354	$2.05	$1,129	$1.71	$903	$1.37
.		10,000	$1,518	$54.71	$1,265	$53.03	$1,012	$43.14
.		20,000	$7,989	$26.03	$6,658	$21.69	$5,326	$17.35
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S	S Occupancy Tenant Improvements							
.		1,000	$4,046	$157.26	$3,372	$131.05	$2,698	$104.84
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U-1	Private Garage/Shed							
.		500	$231	$38.48	$192	$32.05	$154	$25.65
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Hillsborough County, Florida
Schedule of New Construction Fees (Plan Check & Inspection Combined)
(All Construction Types)
Appendix I

		FBC Construction Types: I A, I B			FBC Construction Types: II A, III A, IV, VA		FBC Construction Types: II B, III B, V B	
FBC Class	FBC Occupancy Type	Project Size Threshold	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *
-	Lab/R&D	2,000	$5,242	$7.81	$4,358	$6.51	$3,494	$5.21
-		10,000	$5,867	$22.31	$4,889	$18.59	$3,911	$14.87
-		20,000	$8,097	$8.39	$6,748	$6.99	$5,398	$5.59
-		40,000	$9,774	$7.04	$8,145	$5.86	$6,516	$4.69
-		100,000	$13,995	$3.74	$11,663	$3.11	$9,330	$2.49
-		200,000	$17,730	$8.87	$14,775	$7.39	$11,820	$5.91
-	Agricultural Bldg	1,500	$3,087	$6.14	$2,573	$5.12	$2,058	$4.10
-		7,500	$3,456	$18.02	$2,880	$15.02	$2,304	$12.01
-		15,000	$4,808	$6.69	$4,006	$5.57	$3,205	$4.46
-		30,000	$5,811	$5.55	$4,842	$4.63	$3,874	$3.70
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-	Mercantile Big Box	25,000	$9,094	$1.09	$7,578	$0.91	$6,063	$0.73
-		125,000	$10,181	$3.32	$8,484	$2.76	$6,788	$2.21
-		250,000	$14,375	$1.23	$11,938	$1.03	$9,550	$0.82
-		500,000	$17,400	$0.98	$14,500	$0.82	$11,600	$0.65
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-	Misc. Tenant Improvements	25,000	$8,408	$2.47	$7,006	$2.06	$5,605	$1.65
-		125,000	$10,875	$4.53	$9,063	$3.78	$7,250	$3.02
-		250,000	$16,538	$1.25	$13,781	$1.04	$11,025	$0.83
-		500,000	$19,650	$0.98	$16,375	$0.82	$13,100	$0.65
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-	Residential Additions	100	$909	$18.09	$758	$15.08	$606	$12.06
-		500	$982	$97.70	$818	$81.41	$654	$65.13
-		1,000	$1,470	$42.35	$1,225	$35.29	$980	$28.23
-		2,000	$1,894	$11.56	$1,578	$9.63	$1,262	$7.70
-		5,000	$2,240	$22.01	$1,867	$18.34	$1,494	$14.67
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SHELL BUILDINGS								
Shell	New Commercial	2,000	$5,123	$9.53	$4,269	$7.11	$3,415	$5.69
-		10,000	$5,805	$27.15	$4,838	$22.63	$3,870	$18.10
-		20,000	$8,520	$9.03	$7,100	$8.28	$5,680	$5.02
-		40,000	$10,506	$7.22	$8,755	$6.01	$7,004	$4.81
-		100,000	$14,835	$4.46	$12,363	$3.71	$9,890	$2.97
-		200,000	$19,290	$9.65	$16,075	$8.04	$12,860	$6.43

* Each additional 100 square feet or portion thereof, up to the next highest project size threshold

Hillsborough County, Florida
Schedule of New Construction Fees (Plan Check & Inspection Combined)
(All Construction Types)
Appendix I

		FBC Construction Types: I A, I B			FBC Construction Types: II A, III A, IV, VA		FBC Construction Types: II B, III B, V B	
FBC Class	FBC Occupancy Type	Project Size Threshold	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *
M	M Occupancy Tenant Improvements	10,000	$5,630	$1.71	$4,691	$1.43	$3,753	$1.14
-		50,000	$6,315	$6.30	$5,263	$5.30	$4,210	$4.24
-		100,000	$9,495	$2.12	$7,913	$1.76	$6,330	$1.41
-		200,000	$11,610	$1.61	$9,675	$1.34	$7,740	$1.07
-		500,000	$16,425	$0.98	$13,688	$0.81	$10,950	$0.65
-		1,000,000	$21,300	$2.13	$17,750	$1.78	$14,200	$1.42
R-2	Apartment Bldg							
-		8,000	$3,073	$18.60	$2,561	$15.67	$2,049	$12.54
-		16,000	$4,577	$6.29	$3,814	$5.24	$3,052	$4.19
-		32,000	$5,583	$4.71	$4,653	$3.92	$3,722	$3.14
-		80,000	$7,843	$3.04	$6,536	$2.53	$5,229	$2.02
-		160,000	$10,272	$6.42	$8,560	$5.35	$6,848	$4.28
R-1	Apartment Bldg – Repeat Unit							
-		8,000	$2,976	$18.53	$2,480	$15.44	$1,984	$12.35
-		16,000	$4,458	$6.50	$3,715	$5.42	$2,972	$4.34
-		32,000	$5,499	$4.50	$4,582	$3.75	$3,666	$3.00
-		80,000	$7,661	$2.93	$6,384	$2.44	$5,107	$1.95
-		160,000	$10,003	$6.25	$8,336	$5.21	$6,669	$4.17
R-1	Hotels & Motels	7,500	$4,466	$1.81	$3,722	$1.51	$2,977	$1.21
-		37,500	$5,009	$6.68	$4,174	$5.47	$3,339	$4.38
-		75,000	$7,470	$2.33	$6,225	$1.94	$4,980	$1.55
-		150,000	$9,216	$1.66	$7,680	$1.39	$6,144	$1.11
-		375,000	$12,900	$1.03	$10,800	$0.86	$8,640	$0.69
-		750,000	$16,930	$2.24	$14,025	$1.87	$11,220	$1.50
R-3	Single Family Dwellings	1,500	$1,814	$0.60	$1,511	$0.50	$1,209	$0.40
-		2,000	$1,817	$1.86	$1,514	$1.55	$1,211	$1.24
-		3,000	$1,835	$21.57	$1,529	$17.98	$1,223	$14.38
-		4,000	$2,051	$3.95	$1,709	$3.29	$1,367	$2.63
-		5,000	$2,090	$5.90	$1,742	$4.91	$1,394	$3.93
-		6,000	$2,149	$35.82	$1,791	$29.85	$1,433	$23.88
R-3	Dwellings - Custom, Models	7,000	$2,537	$2.04	$2,114	$1.70	$1,691	$1.36
-		8,000	$2,557	$19.44	$2,131	$16.20	$1,705	$12.96
-		10,000	$2,946	$10.48	$2,455	$8.73	$1,964	$6.99
-		13,000	$3,260	$2.40	$2,717	$2.00	$2,174	$1.60
-		14,000	$3,281	$18.96	$2,737	$15.80	$2,190	$12.64
-		15,000	$3,474	$23.16	$2,895	$19.30	$2,316	$15.44
R-3	Townhomes							
-		1,000	$1,021	$0.90	$1,518	$0.75	$1,214	$0.60
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Hillsborough County, Florida
Schedule of New Construction Fees (Plan Check & Inspection Combined)
(All Construction Types)
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H-7	Health Hazard Materials							
-		500	$2,096	$239.37	$1,747	$199.48	$1,397	$159.58
-		1,000	$3,293	$65.27	$2,744	$54.39	$2,195	$43.51
-		2,000	$3,946	$57.28	$3,288	$47.73	$2,630	$38.19
-		5,000	$5,664	$35.40	$4,720	$29.50	$3,776	$23.60
-		10,000	$7,434	$74.34	$6,195	$61.95	$4,956	$49.56
H	H Occupancy Tenant Improvements							
-		500	$2,058	$235.58	$1,715	$196.31	$1,372	$157.05
-		1,000	$3,236	$63.98	$2,697	$53.31	$2,157	$42.65
-		2,000	$3,876	$56.34	$3,230	$46.95	$2,584	$37.56
-		5,000	$5,566	$31.73	$4,638	$26.44	$3,711	$21.15
-		10,000	$7,152	$71.52	$5,960	$59.60	$4,768	$47.68
I-1.1	Child Care/Nurseries—Full-Time (5+)	500	$1,844	$10.48	$1,537	$8.73	$1,229	$6.98
-		2,500	$2,054	$39.64	$1,711	$33.03	$1,369	$26.42
-		5,000	$3,044	$14.21	$2,537	$11.84	$2,030	$9.47
-		10,000	$3,755	$10.11	$3,129	$8.42	$2,503	$6.74
-		25,000	$5,271	$6.28	$4,393	$5.23	$3,514	$4.18
-		50,000	$6,840	$13.68	$5,700	$11.40	$4,560	$9.12
I-2	Nursing Home/Assisted Living/Convalescent Hospital	1,000	$1,304	$3.97	$1,087	$3.31	$870	$2.65
-		5,000	$1,463	$15.08	$1,219	$12.57	$975	$10.05
-		10,000	$2,217	$4.39	$1,847	$3.66	$1,478	$2.93
-		20,000	$2,656	$4.03	$2,213	$3.36	$1,771	$2.69
-		50,000	$3,865	$2.27	$3,221	$1.89	$2,577	$1.51
-		100,000	$5,000	$5.00	$4,167	$4.17	$3,334	$3.33
I-3	Mental Hospital/Jail	10,000	$4,624	$1.39	$3,853	$1.16	$3,082	$0.92
-		50,000	$5,176	$5.15	$4,315	$4.29	$3,452	$3.43
-		100,000	$7,752	$1.73	$6,460	$1.44	$5,168	$1.15
-		200,000	$9,480	$1.28	$7,900	$1.07	$6,320	$0.85
-		500,000	$13,320	$0.82	$11,100	$0.68	$8,880	$0.54
-		1,000,000	$17,400	$1.74	$14,500	$1.45	$11,600	$1.16
I	I Occupancy Tenant Improvements	4,000	$3,218	$2.40	$2,682	$2.00	$2,146	$1.60
-		20,000	$3,602	$9.42	$3,002	$7.85	$2,402	$6.28
-		40,000	$5,466	$2.00	$4,572	$2.49	$3,658	$1.99
-		80,000	$6,682	$2.23	$5,569	$1.86	$4,454	$1.49
-		200,000	$9,360	$1.44	$7,800	$1.20	$6,240	$0.96
-		400,000	$12,240	$3.06	$10,200	$2.55	$8,160	$2.04
M	New Retail/Not Business Occ	2,500	$1,878	$2.29	$1,565	$1.91	$1,252	$1.53
-		12,500	$2,108	$8.07	$1,756	$6.73	$1,405	$5.38
-		25,000	$3,110	$3.08	$2,597	$2.56	$2,078	$2.05
-		50,000	$3,885	$2.05	$3,239	$1.70	$2,590	$1.36
-		125,000	$5,419	$1.31	$4,516	$1.09	$3,613	$0.87
-		250,000	$7,050	$2.82	$5,875	$2.35	$4,700	$1.88

Hillsborough County, Florida
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FBC Class	FBC Occupancy Type	Project Size Threshold	Base Cost@ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *	Base Cost @ Threshold Size	Cost for Each Additional 100 sf *
D	Day Care Tenant Improvements							
-		1,250	$2,300	$69.83	$1,917	$58.19	$1,534	$46.55
-		2,500	$3,173	$26.24	$2,644	$21.87	$2,115	$17.50
-		5,000	$3,829	$22.08	$3,191	$18.40	$2,553	$14.72
-								
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E-1	Preschool/School (50+ Occupancy)							
-		5,000	$4,077	$28.05	$3,398	$23.88	$2,718	$19.10
-		10,000	$5,510	$11.12	$4,591	$9.26	$3,673	$7.41
-		20,000	$6,621	$9.71	$5,518	$8.09	$4,414	$6.47
-		50,000	$9,533	$4.88	$7,944	$4.06	$6,355	$3.25
-		100,000	$11,970	$11.97	$9,975	$9.98	$7,980	$7.98
E-2, E-3	Preschool/School (<50 Occupancy)							
-		500	$3,274	$228.72	$2,728	$190.60	$2,183	$152.48
-		1,000	$4,418	$89.01	$3,681	$74.18	$2,945	$59.34
-		2,000	$5,308	$77.86	$4,423	$64.88	$3,538	$51.90
-		5,000	$7,643	$38.99	$6,369	$32.49	$5,096	$25.99
-								
E	E Occupancy Tenant Improvements							
-		500	$3,068	$208.28	$2,557	$173.56	$2,045	$138.85
-		1,000	$4,110	$82.07	$3,425	$68.39	$2,740	$54.71
-		2,000	$4,930	$72.76	$4,109	$60.63	$3,287	$48.51
-		5,000	$7,113	$35.76	$5,928	$29.80	$4,742	$23.84
-		10,000	$8,901	$89.01	$7,418	$74.18	$5,934	$59.34
F-1	Manuf/Indust/Mod Hazard	2,000	$1,404	$2.23	$1,170	$1.86	$936	$1.49
-		10,000	$1,583	$7.88	$1,319	$6.57	$1,055	$5.26
-		20,000	$2,371	$3.07	$1,976	$2.56	$1,581	$2.05
-		40,000	$2,986	$1.96	$2,488	$1.64	$1,990	$1.31
-		100,000	$4,164	$1.36	$3,470	$1.13	$2,776	$0.90
-		200,000	$5,520	$2.76	$4,600	$2.30	$3,680	$1.84
F-2	Manuf/Indust/Low Hazard	2,000	$1,755	$2.79	$1,463	$2.33	$1,170	$1.86
-		10,000	$1,979	$9.86	$1,649	$8.21	$1,319	$6.57
-		20,000	$2,964	$3.84	$2,470	$3.20	$1,976	$2.56
-		40,000	$3,732	$2.46	$3,110	$2.05	$2,488	$1.64
-		100,000	$5,205	$1.70	$4,338	$1.41	$3,470	$1.13
-		200,000	$6,900	$3.45	$5,750	$2.88	$4,600	$2.30
H-1	High Explosive Hazardous Rooms							
-		500	$2,153	$221.91	$1,794	$184.93	$1,435	$147.94
-		1,000	$3,262	$72.29	$2,718	$60.24	$2,175	$48.19
-		2,000	$3,985	$54.20	$3,321	$45.16	$2,657	$36.13
-		5,000	$5,611	$33.56	$4,676	$27.96	$3,741	$22.37
-		10,000	$7,289	$72.89	$6,074	$60.74	$4,859	$48.59

HILLSBOROUGH COUNTY MOBILITY FEE

ESTIMATED Hillsborough County Mobility Fee Schedule of Rates

Please schedule effective January 1, 2019, to December 31, 2019

The information provided here is for information only and is not binding, as it could change as a result of changes in development plans or the calculation, in the fee structure, or in other circumstances which may occur prior to issuance of the building permit

ITE LUC	Land Use	Unit	Urban Assessment District[1]	Rural Assessment District
	RESIDENTIAL:			
210	Single Family (Detached) - Less than 1,500 sf & Annual HH Income less than 50% SHIP Definition	du	$1,495	$2,164
	Single Family (Detached) - Less than 1,500 sf & Annual HH Income between 50-80% SHIP Definition	du	$2,265	$3,277
	Single Family (Detached) - Less than 1,500 sf	du	$3,489	$5,052
	Single Family (Detached) - 1,501 to 2,199 sf	du	$4,458	$6,455
	Single Family (Detached) - 2,500 sf and greater	du	$5,006	$7,246
220	Multi-Family (Apartment); 1-2 Stories - Annual HH Income less than 50% SHIP Definition	du	$1,046	$1,515
	Multi-Family (Apartment); 1-2 Stories - Annual HH Income between 50-80% SHIP Definition	du	$1,574	$2,283
	Multi-Family (Apartment); 1-2 Stories	du	$2,832	$4,183
222/223	Multi-Family (Apartment), 3+ Stories - Annual HH Income less than 50% SHIP Definition	du	$649	$942
	Multi-Family (Apartment); 3+ Stories - Annual HH Income between 50-80% SHIP Definition	du	$902	$1,425
	Multi-Family (Apartment); 3+ Stories	du	$1,803	$2,618
230	Residential Condominium/Townhouse	du	$2,515	$3,650
232	High Rise Condominium, 3+ Stories	du	$1,826	$2,650
240	Mobile Home	du	$1,643	$2,384
253	Congregate Care Facility	du	$424	$617
	LODGING:			
310	Hotel	room	$2,259	$2,098
311	Hotel, All Suites	room	$1,740	$2,076
320	Motel	room	$1,609	$1,912
	RECREATION:			
412	General Recreation	acre	$833	$1,066
416	RV Park	site	$531	$755
420	Marina	boat berth	$1,516	$1,807
430	Golf Course	hole	$18,360	$21,855
444	Movie Theater	screen	$17,102	$20,551
492	Health Club	1,000 sf	$13,653	$16,393
	INSTITUTIONS:			
520	Elementary School (Private)	student	$372	$446
522	Middle School (Private)	student	$533	$637
530	High School (Private)	student	$561	$670
540	University/Junior College (7,500 or fewer students) (Private)	student	$1,033	$1,231
550	University/Junior College (more than 7,500 students) (Private)	student	$765	$913
560	Church	1,000 sf	$2,713	$3,232
565	Day Care Center	1,000 sf	$9,093	$10,436
610	Hospital	1,000 sf	$5,813	$6,927
620	Nursing Home	bed	$531	$636
630	Clinic	1,000 sf	$13,490	$16,033
	OFFICE:			
710	General Office 50,000 sq ft or less	1,000 sf	$6,294	$9,133
	General Office 50,001-100,000 sq ft	1,000 sf	$5,327	$7,731
	General Office 100,001-200,000 sq ft	1,000 sf	$4,507	$6,542
	General Office 200,001-400,000 sq ft	1,000 sf	$3,814	$5,536
	General Office greater that 400,000 sq ft	1,000 sf	$3,265	$5,023
715	Single-Tenant Office Building	1,000 sf	$3,713	$5,606
720	Medical Office 10,000 sq ft or less	1,000 sf	$10,160	$13,657
720	Medical Office greater than 10,000 sq ft	1,000 sf	$14,713	$21,341
	RETAIL:			
813	Discount Superstore	1,000 sf	$6,715	$4,103
815	Discount Store, Free-Standing	1,000 sf	$7,559	$9,122
820	Shopping Center 50,000 sq ft or less[2]	1,000 sf gla	$7,334	$9,815
	Shopping Center 50,001-200,000 sq ft[2]	1,000 sf gla	$7,079	$9,134
	Shopping Center 200,001-300,000 sq ft[2]	1,000 sf gla	$6,833	$8,027
	Shopping Centre greater than 300,000 sq ft[2]	1,000 sf gla	$6,603	$7,518
841	New/Used Auto Sales	1,000 sf	$8,765	$10,461
853	Convenience Market w/Gasoline	1,000 sf	$25,921	$31,378
857	Discount Club	1,000 sf	$5,516	$6,679
862	Home Improvement Superstore	1,000 sf	$3,073	$3,697
863	Electronics Superstore	1,000 sf	$3,316	$3,597
880/881	Pharmacy/Drug Store with & without Drive-Thru	1,000 sf	$5,223	$6,280
890	Furniture Store	1,000 sf	$1,425	$1,701
912	Bank/Savings Drive-In	1,000 sf	$13,434	$17,835
931	Quality Restaurant	1,000 sf	$18,487	$22,171
932	High-Turnover Restaurant	1,000 sf	$22,033	$26,372
934	Fast Food Restaurant w/Drive-Thru	1,000 sf	$49,578	$59,636
942	Automobile Care Center	1,000 sf	$6,929	$3,285
944/949	Gas/Service Station with & without Car Wash	fueling position	$5,970	$5,704
947	Self Service Car Wash	service bay	$5,311	$6,324
	INDUSTRIAL:			
110	General Light Industrial	1,000 sf	$2,831	$3,110
120	General Heavy Industrial	1,000 sf	$605	$973
140	Manufacturing	1,000 sf	$1,556	$2,255
150	Warehousing	1,000 sf	$1,439	$2,041
151	Mini-Warehouse	1,000 sf	$517	$745
152	High-Cube Warehouse	1,000 sf	$676	$945

(1) Development in the Urban Assessment District of Pasco, as defined in Section 5.01.01 of the Land Development Code within the Pasco County Impact Fee Ordinance, shall be assessed the same as in the Urban Assessment District.

(2) Either the shopping center or the 300,000 square foot or less, convenience center, and gas station with convenience store and car wash shall be charged the same as the shopping center.

WORKFORCE HOUSING EXAMPLES

Based on reports by studies on workforce housing policies there are now over 2,000 governmental jurisdictions that have policies to promote the development of workforce housing. According to Lincoln Institute of Land Policy (ULI) 80 percent of the jurisdictions are in five states: New Jersey, California, Colorado, Massachusetts and New Jersey due in large part to state laws and judicial decisions.

Housing policy is divided into two sectors: residential and nonresidential policies. Residential policies include a host of tools ranging from inclusionary zoning to impact fees while nonresidential policies are primarily impact or linkage fees.

The use of workforce housing policies to promote attainable housing began in 1969 when both the State of California and the State of Massachusetts enacted legislation to promote affordable/workforce housing. Most of the early programs focused on the residential development sector. More recently jurisdictions began to focus on nonresidential linkage fees as nonresidential development users generated jobs that could not obtain market rate housing.

Since 2009 a number of state courts have curbed the use of inclusionary zoning to promote affordable/workforce housing. In California the courts ruled that inclusionary housing violated the state band on rent control. San Francisco, in 2010, modified its inclusionary ordinance requiring payment of a fee rather than on site construction. As noted by Inclusionary Housing Organization, the programs are almost identical but are designed around different legal rational. This new approach has been labeled "fee first programs".

Since that time numerous jurisdictions have begun to study this approach. The City of Denver has enacted this approach. On September 21, 2016, Mayor Michael B. Hancock signed Council Bill 16-0625 into city law. The bill creates a dedicated affordable housing fund to help create or preserve thousands of affordable homes for low- to moderate-income families in Denver. The bill is funded in part by a linkage fee on commercial and residential development that started January 1, 2017.

The City of Winter Park in 1990 was the first City in Florida to enact an affordable/workforce housing linkage fee. The fee was set at $0.50 per square foot on all commercial and residential developments. Coconut Creek, in 2006, was the second city in Florida to enact a workforce housing linkage fee. Unlike Winter Park the linkage fee was collected only on nonresidential developments. The program is designed to collect over $26 million in revenues at buildout.

In 2015 the City of Jupiter enacted a nonresidential linkage fee of $1.00 SF and an in lieu of fee for residential developments.

Examples: Other Municipalities/Counties

The following tables show some of over 200+ communities that have enacted affordable/workforce housing linkage fees

Entity	Population	Year	Type of Fee	Amount	Fee Collection and Administration	Fee Alternatives	Added Incentive	Exemptions
Winter Park, FL	30,203	1990	Commercial and Residential	$0.50 per sq. ft.	Funds have gone to a number of not-for-profit groups in the community including Habitat for Humanity, the Hannibal Square Land Trust and the Winter Park Housing Authority to help fund homes in Winter Park			Affordable housing; nursing homes, ALF, civic institutions
Jupiter, FL	63,813	2015	Commericial and Industrial Development exceeding 10,000 sq. ft.	$1.00 per sq. ft. after the first 10,000 sq. ft.; Residential fee of $200,000 for each workforce housing dwelling unt offered for sale or $150,000 for each rental workforce housing dwelling unit	Collected at time of issuance of new building permit and deposited into housing trust fund. The fees in the Trust Fund may be used to: 1) second mortgage assistance; 2)Down payment assistance; 3) Acquisition and construction Workforce Housing dwelling units; 4) Resale gap for Workforce Housing dwelling units; 5)Enhancement of county, state and federal affordable housing programs; 6) Rehabilitation of existing Workforce Housing dwelling units; and 7) Administration functions necessary for this program.			Education, religious, charitable or government uses
Coral Springs	128,757		Residential	$1.00 per sq. ft. for 100 units or more				
Riviera Beach	35,431		Industrial, commercial and residential	$5.00 sq. ft. industrial, $10.00 sq. ft. commercial. Residential $30,000. For high rise residential 3.5% of sale price/value (minimum of $30,000)				

8 City of St. Petersburg Winter Park, FL Housing, http://cityofwinterpark.org/departments/planning-community-development/housing/. Accessed on June 14, 2018

9 Town of Jupiter. Memo (2015), http://www.jupiter.fl.s/DocumentCenter/View/7347/Tab 4. Accessed on June 14, 2018

Entity	Pop.	Year	Type of Fee	Amount	Fee Collection and Administration	Fee Alternatives	Added Incentive	Exemptions
Coconut Creek, FL[19]	59,405	2006	All Non-Residential	Industrial $0.37 per sq. ft. Commercial $1.36 per sq. ft. Office $0.15 per sq. ft. Hotel $2.42 per sq. ft. Limited service hotel $0.70 per sq. ft.	Collected at the time of issuance of new building permit.	A developer of non-residential project or mixed use project may construct affordable housing units, upon approval of developer's agreement by city commission.		

[19] Municode, Coconut Creek, Florida Ord. No. 2006-005, § 2, 3-9-06. https://library.municode.com/fl/coconut_creek/codes/code_of_ordinances?nodeId=CD_ORD_CH13LADECO_ARTIADREPR_DIVSIMFE_S13-112AFHOLIFE. Accessed on June 14, 2018.

Entity	Pop.	Year	Type of Fee	Amount	Fee Collection and Administration	Fee Alternatives	Added Incentive	Exemptions
Arlington County, VA[11]	229,164	2006	Commercial only	$1.77 per sq. ft. indexed to Consumer Price Index (CPI) and adjusted annually		May build units if preferred.		
Boston, MA[12]	673,184	1987	Large scale Commercial, Retail, Hotel or Institutional seeking zoning relief	$10.01 per square foot after the first 100,000 square feet, with $8.34 per square foot designated for housing and $1.67 for job training; indexed to CPI and increased every three years	Linkage payments are split into two trust funds. Fees are paid on either a 7-year (downtown) or 12-year (neighborhood) schedule, usually beginning at issuance of a building permit. To address concerns over concentrations of poverty, Boston requires at least half of its fee revenues to be invested in neighborhoods that have less than the citywide average of affordable housing or have a demonstrated need for producing or preserving affordable housing.	May build units if preferred.		

[11] ArlingtonVA.us. *Housing* https://housing.arlingtonva.us/development/land-use-zoning-tools/. Accessed on June 14, 2018.
[12] Boston Municipal Research Bureau (2015). *City's Linkage Program under Review*. http://bmrb.org/citys-linkage-program-under-review/. Accessed June 14, 2018.

Entity	Pop.	Year	Type of Fee	Amount	Fee Collection and Administration	Fee Alternatives	Added Incentive	Exemptions
Denver, CO[13]	693,050	2017	All new development and new additions	Multi-unit dwellings, $1.55 Single-unit, two-unit or any primary residential use other than multi-unit Dwellings, $0.62 Commercial sales, services and repair, $1.76 Civic, public or institutional, $1.76 Industrial, manufacturing and wholesale, $0.41 Agricultural, $0.41 Indexed to CPI and adjusted annually.	Due in full before building permits will be issued. The fund will support permanent housing and supportive services for at-risk residents, low- and moderate-income workforce rental housing, and moderate-income for-sale housing.	An applicant for a building permit has the option of including affordable housing units either on, or within a quarter-mile radius of, the subject property, according to a set formula.		*ADUs *Charitable or religious organization with deed restriction or commercial project that provides social services *Lack of employment impact *Reconstruction of building destroyed by disaster *Affordable housing project *Government building

[13] City and County of Denver. *Affordable Housing Fee*. http://www.denvergov.org/content/denvergov/en/denver-development-services/help-me-find-/Development-Services-updates/affordable-housing-fee.html. Accessed on June 14, 2018.

Entity	Pop.	Year	Type of Fee	Amount	Fee Collection and Administration	Fee Alternatives	Added Incentive	Exemptions
Boulder, CO[14]	108,090	2018 (2021)	All Non-Residential	Retail/restaurant: $20 Office: $30 Hospital: $20 Institutional: $10 Warehousing: $10 Light Industrial: $17.50 (Phased in over three years)				Non-profit/government uses provided relief.
Seattle, WA[15,16]	704,352	2015	Commercial only	$8.00 to $17.50 per square foot in the Downtown and South Lake Union urban centers, depending on the zone their project is in. Elsewhere, they will pay $5 to $10. Linked to upzones. Paid on all sq. footage in the building, included added FAR.	The fees will go into a fund managed the Seattle Office of Housing for both preserving and building affordable housing. Some money will be competitively awarded to developers who build units with rent restrictions based on the tenants' income. Developments favorable for funding will be located in urban villages, near frequent transit service, and in communities threatened by economic displacement.	Commercial developers could choose to include affordable units in their commercial building as a mixed-use project or commit to building affordable units elsewhere within	Amount of commercial development allowed increased by one Floor Area Ratio (FAR)	Exemptions for the first 4,000 square feet of required commercial space where buildings front designated pedestrian streets.

[14] City of Boulder. *Council Agenda Item: Meeting date on April 17, 2018.* https://www.static.bouldercolorado.gov/docs/Commercial_Linkage_Fee_4172018_1-201804151102.pdf?_ga=2.73024403.1243729710.1528900838-1583373531.1528900338. Accessed on June 14, 2018.

[15] The Urbanist (2015). *How Seattle's Mandatory Affordable Housing Program Will Work.* https://www.theurbanist.org/2015/10/01/how-seattles-mandatory-affordable-housing-program-will-work. Accessed on June 14, 2018.

[16] Seattle.gov. *Housing Affordability and Livability.* http://www.seattle.gov/hala/about/mandatory-housing-affordability-(mha). Accessed on June 14, 2018.

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CITY OF ST. PERTERSBURG WORKFORCE HOUSING NEED/NEXUS STUDY

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WORKFORCE HOUSING NEED/NEXUS STUDY

Understanding Housing Needs

Demonstrate Workforce Housing Need

- Assumptions utilized in Study
- City Residential Income Data
- Existing Residential Cost Burden (ownership and rental)
- Residential GAP analysis (MLS)

Residential Nexus Analysis

- Florida Statutes
- Construction Creates Jobs
- Households Create need for Service Jobs

Non Residential Nexus Analysis

- Calculated new employees by Land Use Type: Office, Commercial, Industrial, Hotel
- Calculated new employee wage to Household Income
- Summarize Non-Residential Possible Nexus Fees

Brief summary of other Cities Workforce Housing Programs

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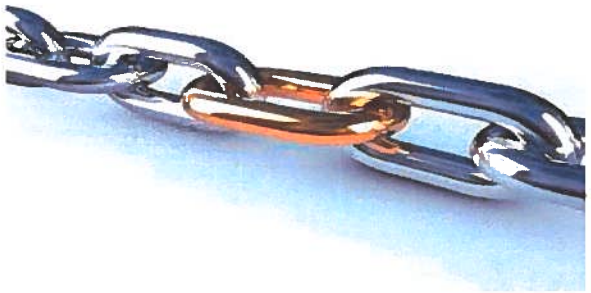
What are linkage/mitigation fees?

Linkage fees are a means for local government to collect monies to help support workforce housing. These fees, collected from market rate residential development and non-residential development, are placed in a trust fund to provide for the construction and maintenance of affordable/workforce residential units.



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SUMMARY: IMPACT/LINKAGE FEES

Fees paid

Market rate housing development or new commercial development

Affordable Housing Fund

New Affordable Housing

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METHODOLOGY

Inputs

- Housing prices/ rents
- Employment density
- Only considers St. Petersburg worker households (60%-120% St. Petersburg Household Income)
- Impacts limited to St. Petersburg
- Affordability gap
- **Recommended fees are lower than maximum nexus fees**

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WORKFORCE HOUSING NEED/NEXUS STUDY

City Socioeconomic Data

	2017 ACS
• Race: White Alone	72%
• Hispanic:	7.6%
• Median Age	42.6
• Aged 62+	21.5%
• Median Family Income	$75,582
• Median Household Income	$55,134
• Owner Occupied	58.1%
• Renter	41.9%
• Owner Median Value	$165,000
• Median Rent	$1,015

Source: Census Bureau, American Community Survey

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CITY OF ST. PETERSBURG
WORKFORCE HOUSING NEED/NEXUS STUDY

Household Income by Type - 2017

Subject	St. Petersburg city, Florida							
	Households		Families		Married-couple families		Nonfamily households	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total	109,834	+/-3,550	56,876	+/-2,334	40,657	+/-2,218	52,958	+/-3,494
Less than $10,000	6.30%	+/-1.0	3.40%	+/-1.2	2.70%	+/-1.4	9.60%	+/-1.7
$10,000 to $14,999	4.90%	+/-1.3	2.00%	+/-1.0	0.70%	+/-0.6	8.40%	+/-2.3
$15,000 to $24,999	11.50%	+/-1.7	7.80%	+/-2.0	4.00%	+/-1.4	15.90%	+/-2.6
$25,000 to $34,999	9.50%	+/-1.4	8.10%	+/-1.9	6.90%	+/-2.1	11.30%	+/-2.3
$35,000 to $49,999	12.70%	+/-1.6	11.30%	+/-2.2	8.90%	+/-2.2	14.40%	+/-2.4
$50,000 to $74,999	19.10%	+/-2.2	16.60%	+/-2.7	14.90%	+/-2.7	20.70%	+/-3.3
$75,000 to $99,999	13.40%	+/-2.0	18.50%	+/-2.7	21.80%	+/-3.1	8.60%	+/-1.8
$100,000 to $149,999	11.70%	+/-1.4	16.30%	+/-2.4	19.40%	+/-3.1	6.20%	+/-1.5
$150,000 to $199,999	4.80%	+/-1.0	6.30%	+/-1.4	8.20%	+/-1.7	2.30%	+/-1.1
$200,000 or more	6.20%	+/-1.1	9.60%	+/-1.8	12.60%	+/-2.4	2.60%	+/-0.9
Median income (dollars)	$55,134	+/-2,688	$75,582	+/-3,471	$85,853	+/-3,267	$37,353	+/-3,724
Mean income (dollars)	$80,310	+/-4,334	$103,097	+/-8,133	N	N	$54,117	+/-4,110

Source: Census Bureau, American Community Survey

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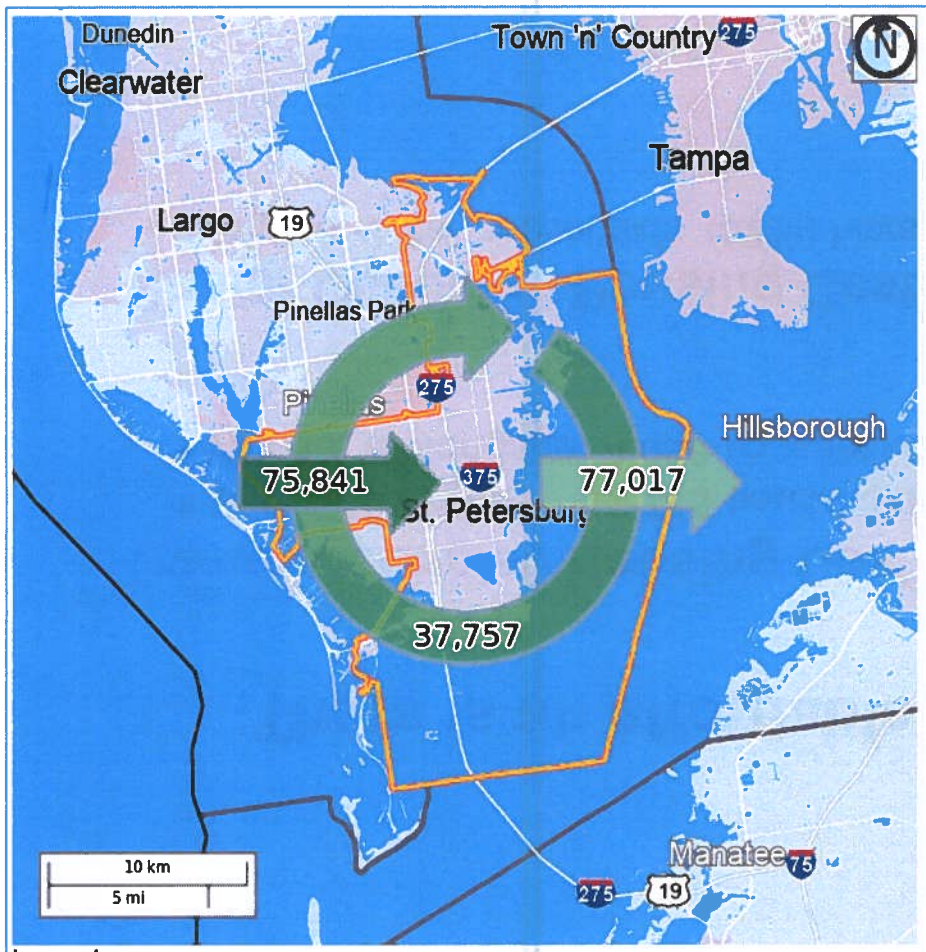
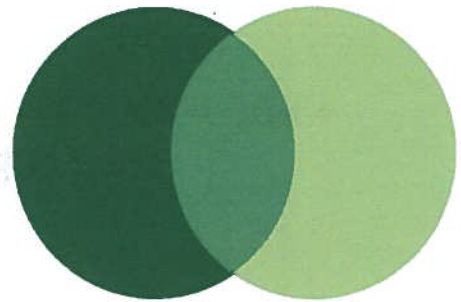
We live here but do not work here



Legend

Note: Overlay arrows do not indicate directionality of worker flow between home and employment locations.

Inflow/Outflow Job Counts in 2015



75,841 - Employed in Selection Area, Live Outside
77,017 - Live in Selection Area, Employed Outside
37,757 - Employed and Live in Selection Area

Inflow/Outflow Job Counts (All Jobs)

	2015 Count	2015 Share
Employed in the Selection Area	113,598	100.0%
Employed in the Selection Area but Living Outside	75,841	66.8%
Employed and Living in the Selection Area	37,757	33.2%
Living in the Selection Area	114,774	100.0%
Living in the Selection Area but Employed Outside	77,017	67.1%
Living and Employed in the Selection Area	37,757	32.9%

Reset Highlighting

Source: onthemap

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There is an affordable housing need

Owner Occupied Housing Cost Burden

- With a Mortgage: **12,745** households (33%) have Cost Burden 30%+
- Without a Mortgage: **4,036** households (17%) have Cost Burden 30%+

Renter Occupied Housing Cost Burden

- **21,638** rental households (52%) have Cost Burden 30%+

Source: Census Bureau, American Community Survey, 2017

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Current Housing Costs: May 2019

$266.5K	$206	$279K
Median Listing Home Price	Median Listing Home Price/Sq Ft	Median Sold Home Price

Source: Realtor.com

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HOUSING IMPACT FEE

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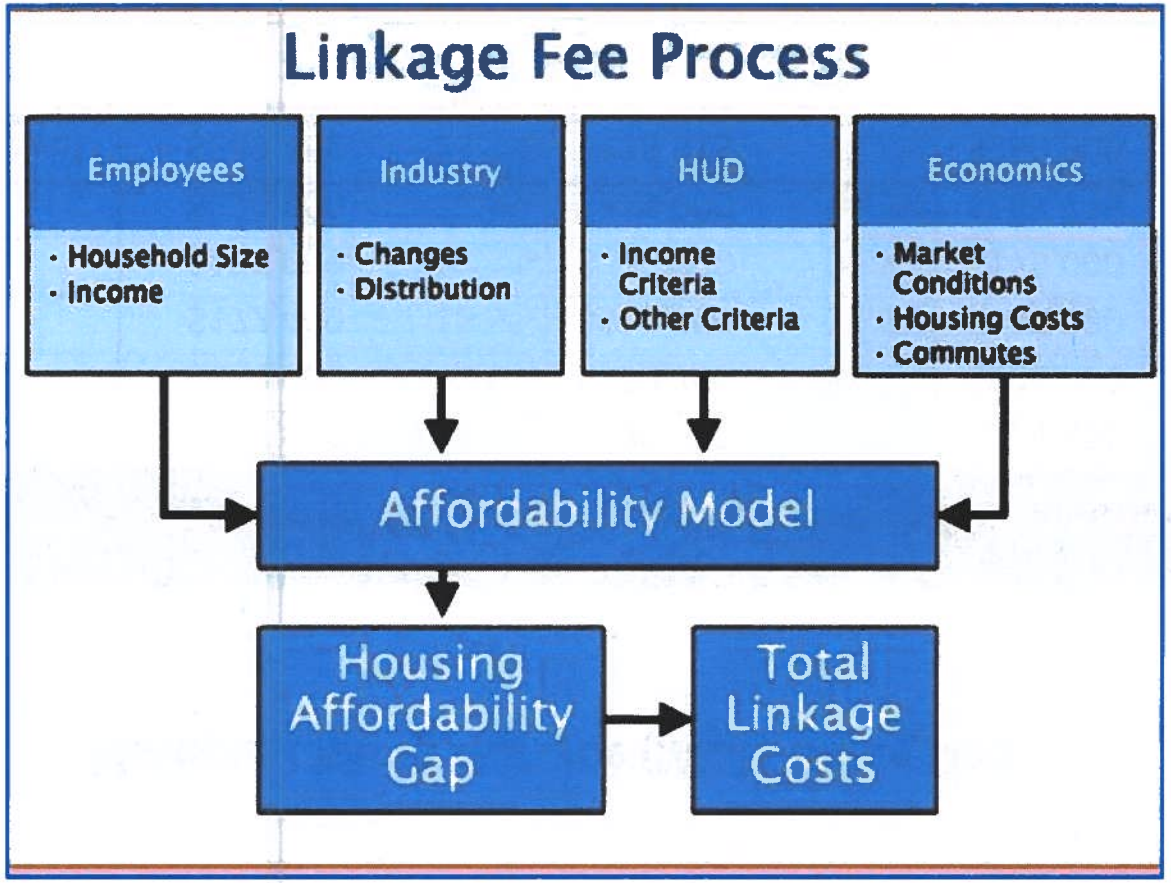

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WORKFORCE HOUSING NEED/NEXUS STUDY

Multiple Listing Service (MLS) Sales Data

Median Sales Price						
	Combined		Single Family		Townhouse/Condo	
2014	$137,000		$139,000		$125,650	
2015	$148,000	8.0%	$150,700	8.4%	$126,000	0.3%
2016	$172,400	16.5%	$179,000	18.8%	$147,500	17.1%
2017	$195,000	13.1%	$200,000	11.7%	$175,000	18.6%
2018	$220,000	12.8%	$229,000	14.5%	$183,775	5.0%
2019 (Jan -Feb)	$249,188	13.3%	$235,515	2.8%	$280,000	52.4%

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WORKFORCE HOUSING NEED/NEXUS STUDY

Current Apartment Rental Market

	LOW	MEAN	MEDIAN	HIGH
Current Asking Rent/Unit	$814	$1,668	$1,138	$2,785
Current Effective Rent/Unit	$725	$1,486	$1,014	$2,481
Current Vacancy Rate	0.0%	5.9%	2.3%	21.6%
Property Size (units)	43	211	175	477
Year Built	1945	1997	1976	2018

	STUDIO	1BR	2BR	3BR
Current Asking Rent/Unit	$1,222	$1,489	$1,987	$1,726
Current Effective Rent/Unit	$1,089	$1,326	$1,770	$1,537
Unit Size (SF)	528	724	1,051	1,178
Units	20	102	85	4
Current Asking Rent/SF	$2.30	$2.03	$1.85	$1.45

Source: REIS

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CITY OF ST. PETERSBURG
WORKFORCE HOUSING NEED/NEXUS STUDY
AFFORDABILITY MODEL
Household GAP 2019

Median SF Sales Price: $235,515 - $229,369 ($6,146)
Median TH/CD Listing Price: $183,775 - $229,369 (+$45,594)
Median Rental 2Br: $1,987 - $1,443 ($544)

Affordability Calculator
Median Household Income 2019:

Downpayment	10%	**Utilities**	15%
Cost Burden	30%	**Tax & Ins**	20%
Interest Rate	4.25%	**Other Debt**	12%

Income Category	Median Income (%)	Household Income	Monthly Rent	Monthly Payment	Payment - Tax & Ins	Amt of Mortgage	Home Price
Very Low	50%	$28,850	$721	$635	$508	$103,216	$103,216
Very Low	60%	$34,620	$866	$762	$609	$123,859	$123,859
Low	80%	$46,160	$1,154	$1,016	$812	$165,145	$183,495
Median	100%	$57,700	$1,443	$1,269	$1,016	$206,432	$229,369
Moderate	120%	$69,240	$1,731	$1,523	$1,219	$247,718	$275,242

Assumes .0464 Consumer Price Index (CPI)

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CITY OF ST. PETERSBURG
WORKFORCE HOUSING NEED/NEXUS STUDY

Affordability GAP Analysis	Based on St. Petersburg Income				
Apartments Based on St. Petersburg Median Household Income	Market Grade	VLI (50%) Income	VLI (60%)	Low Income (60% -80)	Moderate Income (80%-120%)
Land	9	9	9	9	9
Density/Acres	38	38	38	38	38
Units	327	327	327	327	327
Gross Unit Size	944	944	944	944	944
Unit Size	850	850	850	850	850
Average Bedroom	2	2	2	2	2
Person Per Per Bedroom	2	2	2	2	2
Cost Assumptions					
Land	$6,020,000	$6,020,000	$6,020,000	$6,020,000	$6,020,000
Land/Acre	$602,000	$602,000	$602,000	$602,000	$602,000
Land Per Unit	$18,421	$18,421	$18,421	$18,421	$18,421
Direct Costs	$44,444,800	$44,444,800	$44,444,800	$44,444,800	$44,444,800
Direct Construction Cost/Net SF	$160	$160	$160	$160	$160
Direct Construction Costs/Unit	$136,000	$136,000	$136,000	$136,000	$136,000
Indirect Costs as % of Direct costs	25%	25%	25%	25%	25%
Indirect Costs/Unit	$34,000	$34,000	$34,000	$34,000	$34,000
Profit Margin	12%	12%	12%	12%	12%
Profit	$22,611	$22,611	$22,611	$22,611	$22,611
Total Cost (includes parking)	**$211,032**	**$211,032**	**$211,032**	**$211,032**	**$211,032**
Cost PSF	**$248**	**$248**	**$248**	**$248**	**$248**
Maximum Supported Apartment/Price		50%	60%	80%	120%
Income Available /Year (Median Household Income); 5 % Vacancy Rate	$19,893	$6,991	$8,389	$11,185	$16,778
Less Operating Expenses	25%	25%	25%	25%	25%
Less Operating Expense per Unit	$4,973	$4,973	$4,973	$4,973	$4,973
Net Operating Income (NOI)	**$14,920**	**$2,017**	**$3,416**	**$6,212**	**$11,804**
Capitalization Rate	6.0%	6.0%	6.0%	6.0%	6.0%
Total Supportable Unit Value	$248,663	$33,623	$56,925	$103,530	$196,738
GAP	$37,631	($177,408)	($154,106)	($107,502)	($14,293)
GAP PSF	$44	($209)	($181)	($126)	($17)
Percent Employees		19%	4%	42%	14%
Total GAP PSF		($40.64)	($7.20)	($52.73)	($2.28)
Commute Adjustment (33%)		($13.41)	($2.38)	($17.40)	($0.75)
Rental GAP					($33.94)
GAP 60-120					($20.53)
GAP 80-120					($18.15)

Recommended Maximum Residential Linkage Fee

$33.94

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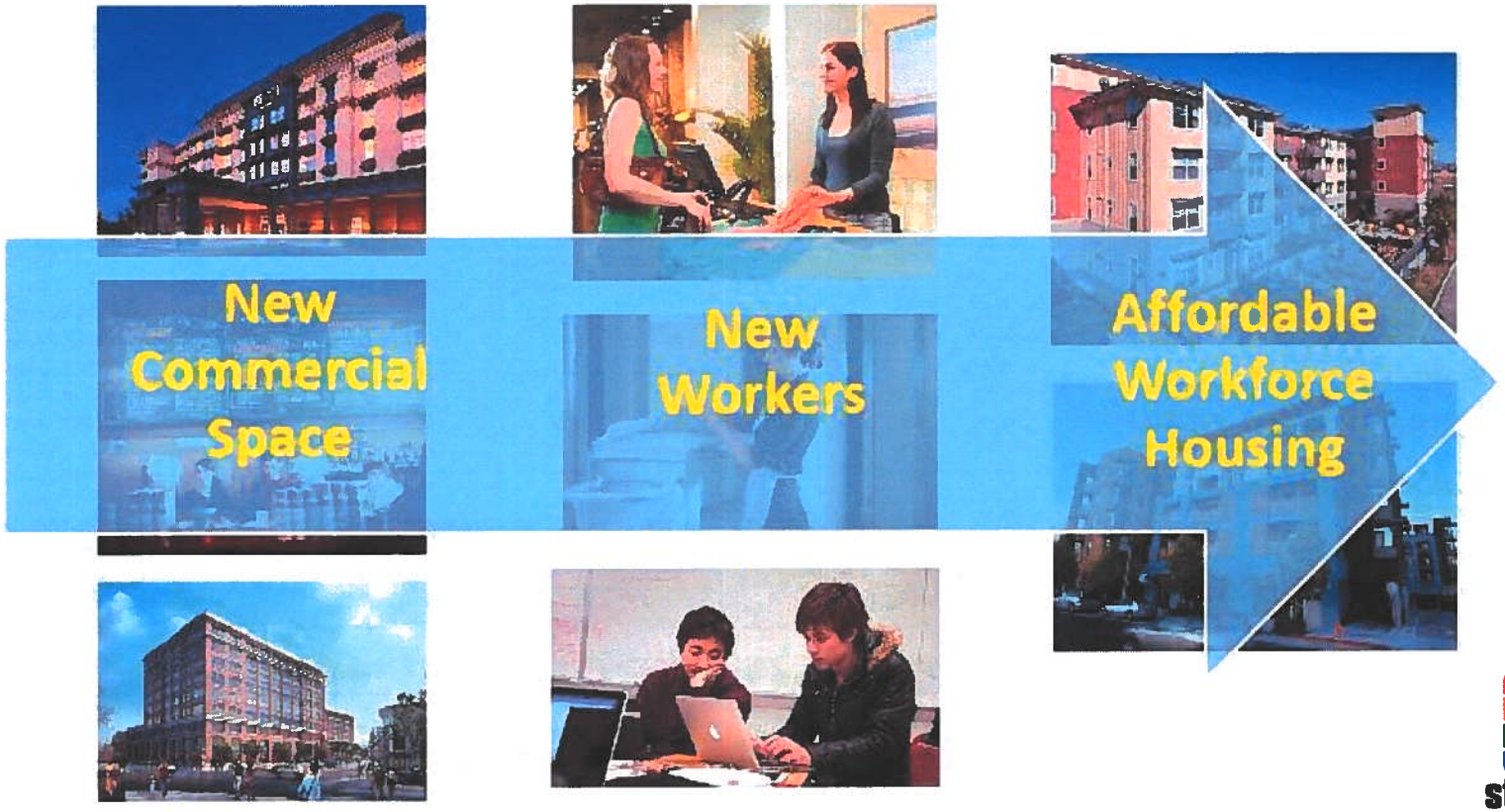
COMMERCIAL LINKAGE FEE



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Estimate of Total Employees (per 100,000 gross SF)

	Industrial	Commercial	Office	Hotel	Limited Service /Estended Stay Lodging
Employees/1,000 SF	1.25	2.2	3.3	0.8	0.1
Space per Employee	800	450	300	1,300	8,000
Employees per Prototype	125	220	333	77	12.5

Note: All density factors are averages and individual uses can be expected to be fairly divergent

Source; GSA Workplace Standards Benchmarking

Adjustment for Changing Industries

	Industrial	Commercial	Office	Hotel	Extended Stay Lodging
Number of Employees	125	220	333	77	13
Adjustment Factor	6	11	17	4	1
Employees after Adjustment	119	209	317	73	12

Note: This adjustment is to take into account any declines, changes and shifts within all sectors of the economy and to recognize that new space is not 100% equivalent to net new employees.

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Industry Distribution of Employees

Industry Title	NAICS Code	Total Wages	Average Employment	Percent Land Use	Annual Wage
Office					
Information	51	$106,158,438	6,549	4.1%	$64,836
Finance and Insurance	52	$514,774,260	21,642	13.6%	$95,144
Real Estate and Rental and Leasing	53	$124,471,872	10,577	6.7%	$47,072
Professional and Technical Services	54	$573,207,919	31,176	19.6%	$73,544
Management of Companies and Enterprises	55	$469,515,150	15,685	9.9%	$119,740
Health Care and Social Assistance	62	$1,001,865,873	73,234	46.1%	$54,720
			158,863	100%	
Hotel					
Accommodation and Food Services	72	$262,218,544	48,900	100%	$21,448
Industrial					
Manufacturing	31-33	$586,886,589	32,892	41.0%	$71,372
Wholesale Trade	42	$261,800,052	13,565	16.9%	$77,200
Administrative and Waste Services	56	$242,705,653	28,146	35.1%	$34,492
Transportation and Warehousing	48-49	$68,747,423	5,552	6.9%	$49,528
			80,155		
Commercial					
Retail Trade	44-45	$452,213,531	54,879	80.6%	$32,960
Other Services, Except Public Administration	81	$122,410,078	13,238	19.4%	$36,988
			68,117		

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Adjustment from Employees to Land Use

Industry Title	NAICS Code	Average Employment	Percent Land Use
Office		**317**	**44.1%**
Information	51	13	4.1%
Finance and Insurance	52	43	13.6%
Real Estate and Rental and Leasing	53	21	6.7%
Professional and Technical Services	54	62	19.6%
Management of Companies and Enterprises	55	31	9.9%
Health Care and Social Assistance	62	146	46.1%
		317	100%
Hotel			**0.0%**
Accommodation	721	**73**	100%
Industrial		**119**	**16.6%**
Manufacturing	31-33	49	41.0%
Wholesale Trade	42	20	16.9%
Administrative and Waste Services	56	42	35.1%
Transportation and Warehousing	48-49	8	6.9%
		119	100%
Commercial		**209**	**29.1%**
Retail Trade	44-45	168	80.6%
Other Services, Except Public Administration	81	41	19.4%
		209	100.0%

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Estimates of Employee Households Meeting the Income Definitions for NAICS 54 (Professional)

Occupation title	Employment	Percent of total employment	Median hourly wage	Annual Median Wage	Household Income Factor	Estimate Household Income
All Occupations	**62**	**100.00%**	**$31.43**	**$50,288**	**1.6**	**$80,461**
Personal Care and Service Occupations	0	0.41%	$10.87	$17,392	1.6	$27,827
Food Preparation and Serving Related Occupations	0	0.10%	$11.17	$17,872	1.6	$28,595
Healthcare Support Occupations	1	0.94%	$12.55	$20,080	1.6	$32,128
Building and Grounds Cleaning and Maintenance Occupations	0	0.33%	$13.25	$21,200	1.6	$33,920
Transportation and Material Moving Occupations	1	0.81%	$14.73	$23,568	1.6	$37,709
Farming, Fishing, and Forestry Occupations	0	0.06%	$15.22	$24,352	1.6	$38,963
Office and Administrative Support Occupations	12	19.13%	$18.24	$29,184	1.6	$46,694
Production Occupations	1	1.50%	$18.85	$30,160	1.6	$48,256
Protective Service Occupations	0	0.17%	$18.99	$30,384	1.6	$48,614
Healthcare Practitioners and Technical Occupations	2	2.44%	$22.86	$36,576	1.6	$58,522
Installation, Maintenance, and Repair Occupations	1	0.86%	$23.75	$38,000	1.6	$60,800
Community and Social Service Occupations	0	0.12%	$25.65	$41,040	1.6	$65,664
Construction and Extraction Occupations	1	0.87%	$25.84	$41,344	1.6	$66,150
Arts, Design, Entertainment, Sports, and Media Occupations	3	4.08%	$26.59	$42,544	1.6	$68,070
Sales and Related Occupations	3	4.77%	$28.42	$45,472	1.6	$72,755
Education, Training, and Library Occupations	0	0.17%	$29.43	$47,088	1.6	$75,341
Life, Physical, and Social Science Occupations	2	3.61%	$32.18	$51,488	1.6	$82,381
Business and Financial Operations Occupations	9	15.23%	$34.29	$54,864	1.6	$87,782
Architecture and Engineering Occupations	6	10.44%	$36.82	$58,912	1.6	$94,259
Legal Occupations	5	7.53%	$37.00	$59,200	1.6	$94,720
Computer and Mathematical Occupations	11	17.30%	$42.34	$67,744	1.6	$108,390
Management Occupations	6	9.12%	$66.00	$105,600	1.6	$168,960

Note One of 15 Tables

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Estimates of Households that meet HUD Income Criteria (Affordability Model)

Employment Category	VLI <60%	VLI 60-80%	Work 120%	Above >120%
Office	78	66	181	10
Hotel	182	7	1	0
Limited Service Hotel	4	1	0	0
Industrial	23	25	33	5
Commercial	26	17	7	1

Conversation of Jobs to Households

Households by Land Use	VLI <60%	VLI 60-80%	Work 120%
Household Income (max)	$48,905	$65,206	$97,810
Office	49	41	113
Hotel/Food and Accommodation	114	4	1
Limited Service Hotel	3	1	0
Industrial	21	16	2
Commercial (retail)	16	11	4

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Households by Land Use	VLI <50%	VLI 50-60%	VLI 60-80%	Work 120%	Above >120%
Household Income (max)	$28,394	$34,073	$45,430	$68,146	>$78,800
Office	28	21	44	41	103
Hotel/Food and Accommodation	114	0	0	4	1
Limited Service Hotel	3	0	4	0	0
Industrial	14	0	54	16	21
Commercial (retail)	16	0	116	11	4
Total	175	21	219	73	129

Before Commute Adjustment	Industrial	Commercial	Office	Hotel	Limited Service Hotel
Very Low (Under 60% of Median Income)	14	16	49	114	3
Low (60% to 80% of Median Income)	54	116	44	0	4
Moderate (80% to 120% of Median Income)	16	11	41	4	0
Total	84	143	134	118	7
After Commute Adjustment	33.0%				
Very Low (Under 60% of Median Income)	5	5	16	38	1
Low (60% to 80% of Median Income)	18	38	15	0	1
Moderate (80% to 120% of Median Income)	5	4	14	1	0
	28	47	44	39	2

Note: Residents of St. Petersburg hold 33.2% of the jobs in St. Petersburg. The estimates of households for each income category in a protypical 100,000 SF building are adjusted downwards by this commute factor.

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CITY OF ST. PETERSBURG
WORKFORCE HOUSING NEED/NEXUS STUDY

Household Affordability GAP based on Current Sales (MLS) data

St. Petersburg	Income Targe % AMI	Annual HH Income	Maximum Sales Price	Median Value (2018)	Affordability Gap per Unit
Affordable Units					
CondominiumTownhomes (Based on Current MLS Data)				**$183,775**	
Very Low Income (50% of AMI)	50%	$28,850	$103,216		($80,559)
Very Low Income (60% of AMI)	60%	$34,620	$123,859		($59,916)
Low Income (80% of AMI)	80%	$46,160	$183,495		($280)
Moderate Income (120% of AMI)	120%	$69,240	$275,242		$91,467
Median Income		$57,700	$229,369		$45,594
Single Family Units (Based on Current MLS Data)				**$235,515**	
Very Low Income (50% of AMI)	50%	$28,850	$103,216		($132,299)
Very Low Income (60% of AMI)	60%	$34,620	$123,859		($111,656)
Low Income (80% of AMI)	80%	$46,160	$183,495		($52,020)
Moderate Income (120% of AMI)	120%	$69,240	$275,242		$39,727
Median Income		**$57,700**	$229,369		($6,146)

AMI - Area Median Income for as published by HUD/ACS.

Notes: Ongoing Expenses are based on estimates of utilities, homeowner association dues, property taxes, etc. based on unit value.

Annual debt service assumes a 30 year mortgage at 4.25%, 12% other debt, with a 10% down payment.

Source:Pinellas Realtors, 2018/19 data

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WORKFORCE HOUSING NEED/NEXUS STUDY

Maximum Linkage Fee based on Current Sales Data

Before Commute Adjustment	Industrial	Commercial	Office	Hotel	Limited Service Hotel	Gap	Affordability Industrial	Affordability Commercial	Affordability Office	Affordability Hotel	Affordability Limited Service Hotel
Condominiums/Townhouses											
Very Low (under 60% of Median Income)	14	16	45	44	3	-$70,238	-$10.10	-$11.57	-$31.34	-$30.77	-$1.76
Low (60% to 80% of Median Income)	54	116	42	0	4	-$280	-$0.15	-$0.33	-$0.12	$0.00	-$0.01
Moderate (80% to 120% of Median Income)	16	11	39	4	0	$91,467	$14.44	$9.72	$36.11	$4.00	$0.29
Total	84	143	126	48	7		$4.20	-$2.18	$4.65	-$26.77	-$1.48
Single Family											
Very Low (Under 60% of Median Income)	14	26	71	70	4	-$121,978	-$17.53	-$32.15	-$87.09	-$85.49	-$4.88
Low (60% to 80% of Median Income)	54	186	67	0	7	-$52,020	-$27.96	-$96.76	-$35.11	$0.00	-$3.64
Moderate (80% to 120% of Median Income)	16	17	63	7	1	$39,727	$6.27	$6.75	$25.09	$2.78	$0.20
Total	84	229	202	77	12		-$39.22	-$122.15	-$97.11	-$82.71	-$8.32
After Commute Adjustment	33%						33%				
Condominums											
Very Low (Under 60% of Median Income)	5	5	15	14	1	-$70,238	-$3.33	-$3.82	-$10.34	-$10.15	-$0.58
Low (60% to 80% of Median Income)	18	38	14	0	1	-$280	-$0.05	-$0.11	-$0.04	$0.00	$0.00
Moderate (80% to 120% of Median Income)	5	4	13	1	0	$91,467	$4.77	$3.21	$11.92	$1.32	$0.09
Total	28	47	42	16	2		$1.38	-$0.72	$1.53	-$8.83	-$0.49
Single Family											
Very Low (Under 60% of Median Income)	5	9	24	23	1	-$121,978	-$5.79	-$10.61	-$28.74	-$28.21	-$1.61
Low (60% to 80% of Median Income)	18	61	22	0	2	-$52,020	-$9.23	-$31.93	-$11.59	$0.00	-$1.20
Moderate (80% to 120% of Median Income)	5	6	21	2	0	$39,727	$2.07	$2.23	$8.28	$0.92	$0.07
Total	28	76	67	25	4		-$12.94	-$40.31	-$32.05	-$27.29	-$2.75

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WORKFORCE HOUSING NEED/NEXUS STUDY

Summary Maximum Nonresidential Linkage Fee Based on Current Sales (MLS) Data

	Industrial	Commercial	Office	Hotel	Extended Stay Hotel
Townhome					
Very low income	-$3.33	-$3.82	-$10.34	-$10.15	-$0.58
Low income	-$0.05	-$0.11	-$0.04	$0.00	$0.00
Moderate income	$4.77	$3.21	$11.92	$1.32	$0.09
Total	$1.38	-$0.72	$1.53	-$8.83	-$0.49
Single Family					
Very low income	-$5.79	-$10.61	-$28.74	-$28.21	-$1.61
Low income	-$9.23	-$31.93	-$11.59	$0.00	-$1.20
Moderate income	$2.07	$2.23	$8.28	$0.92	$0.07
Total	-$12.94	-$40.31	-$32.05	-$27.29	-$2.75
Combined					
Very low income	-$9.12	-$14.43	-$39.08	-$38.37	-$2.19
Low income	-$9.28	-$32.04	-$11.63	$0.00	-$1.21
Moderate income	$6.84	$5.44	$20.20	$2.24	$0.16
Total	-$11.56	-$41.03	-$30.51	-$36.13	-$3.24

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Maximum Linkage Fee Based on New Construction Data

Before Commute Adjustment	Industrial	Commercial	Office	Hotel	Limited Servi Hotel	Gap	Affordability Industrial	Commercial	Office	Hotel	Limited Service Hotel
Very Low	14	16	45	44	3	-$220,325	-$31.67	-$36.29	-$98.32	-$96.51	-$5.51
(Under 60% of Median Income)											
Low	54	116	42	0	4	-$153,732	-$82.63	-$178.71	-$64.86	$0.00	-$6.73
(60% to 80% of Median Income)											
Moderate	16	11	39	4	0	-$47,182	-$7.45	-$5.01	-$18.63	-$2.06	-$0.15
(80% to 120% of Median Income)											
Total	84	143	126	48	7		-$121.75	-$220.02	-$181.80	-$98.58	-$12.38
After Commute Adjustment	33%						33%				
Very Low	5	5	15	14	1	-$220,325	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
(Under 60% of Median Income)											
Low	18	38	14	0	1	-$153,732	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
(60% to 80% of Median Income)											
Moderate	5	4	13	1	0	-$47,182	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
(80% to 120% of Median Income)											
Total	28	47	42	16	2		-40.18	-72.61	-59.99	-32.53	-4.09

Summary Maximum Nonresidential Linkage Fee Based on New Construction Data

	Industrial	Commercial	Office	Hotel	Extended Stay
Rental					
Very low income	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
Low income	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
Moderate income	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
Rental	**-$40.18**	**-$72.61**	**-$59.99**	**-$32.53**	**-$4.09**

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WORKFORCE HOUSING NEED/NEXUS STUDY

Maximum Recommended Linkage Fee

	Industrial	Commercial	Office	Hotel	Extended Stay Hotel
New Construction					
Very low income	-$10.45	-$11.98	-$32.44	-$31.85	-$1.82
Low income	-$27.27	-$58.98	-$21.40	$0.00	-$2.22
Moderate income	-$2.46	-$1.65	-$6.15	-$0.68	-$0.05
Total	-$40.18	-$72.61	-$59.99	-$32.53	-$4.09
MLS Pricing					
Very low income	-$9.12	-$14.43	-$39.08	-$38.37	-$2.19
Low income	-$9.28	-$32.04	-$11.63	$0.00	-$1.21
Moderate income	$6.84	$5.44	$20.20	$2.24	$0.16
Total	-$11.56	-$41.03	-$30.51	-$36.13	-$3.24
Combined Average					
Very low income	-$9.78	-$13.20	-$35.76	-$35.11	-$2.00
Low income	-$18.27	-$45.51	-$16.51	$0.00	-$1.71
Moderate income	$2.19	$1.89	$7.02	$0.78	$0.06
Total	-$25.87	-$56.82	-$45.25	-$34.33	-$3.66

- Industrial land use fee would be $26 per square foot of building area
- Commercial land use fee would be $57 per square foot of building area
- Office land use fee would be $45 per square foot of building area
- Hotel fee would be $34 per square foot of building area
- Limited or extended stay hotel fee would be $4 per square foot of building area

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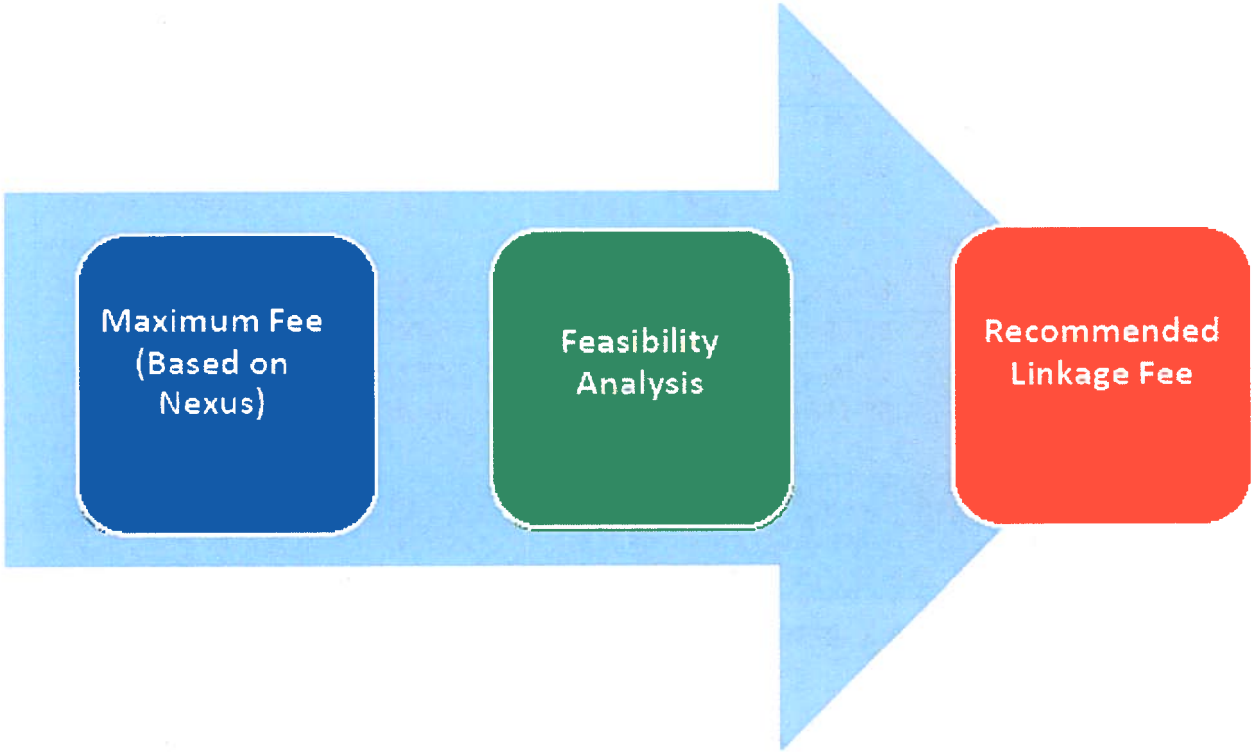
GETTING TO THE RECOMMENDED LINKAGE IMPACT FEE



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Pro Forma Analysis

Development Costs	Metric	Hotel per SF of GBA	Hotel Total	Hotel-DC per SF of GBA	Hotel-DC Total	Retail/Restaurant/ Services per SF of GBA	Retail/Restaurant/ Services Total	Office per SF of GBA	Office Total	Office-DC per SF of GBA	Office-DC Total	Industrial per SF of GBA	Industrial Total	Apartment (2 Bedroom) per SF of GBA	Apartment (2 Bedroom) Total
Land (1)		$16.07	$803,489	$25.25	$1,404,672	$30.00	$669,575	$21.43	$1,071,319	$33.67	$1,683,502	$22.96	$3,443,526	$16.44	$3,698,000
Direct Costs															
Building & On-Site Improvements		$180	$18,000,000	$220	$29,000,000	$120	$3,000,000	$150	$7,500,000	$175	$9,000,000	$50	$7,500,000	$144	$44,444,800
Parking (Surface)	$2,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Podium/Structured	$24,000				$900,000						$2,400,000				
Total Direct Costs		$180	$18,000,000	$220	$29,900,000	$120	$3,000,000	$150	$7,500,000	$175	$11,400,000	$50	$7,500,000	$144.00	$44,444,800
Indirect Costs (2)															
Hotel Indirect Costs @	25%	$45.00	$4,500,000	$50.00	$7,250,000										
Retail Indirect Costs @	25%					$30.00	$750,000								
Office Indirect Costs @	20%							$30.00	$1,500,000	$45.60	$2,280,000				
Industrial Indirect Costs @	25%											$12.50	$1,875,000		
Apartment Indirect Costs@	25%													$13.31	$8,888,960
Total Indirect Costs	20%	$45.00	$4,500,000	$50.00	$7,250,000	$30.00	$750,000	$30.00	$1,500,000	$45.60	$2,280,000	$12.50	$1,875,000	$13.31	$8,888,960
Total Development Costs (TDC) without Nexus Fees															
No Fee		$233	$23,303,489	$386	$38,554,672	$177	$4,419,575	$201	$10,071,319	$307.27	$15,363,502	$85	$12,818,526	$205	$57,031,760
Maximum Linkage Fees		$46.74	$4,674,000	$46.74	$4,674,000	$78.81	$1,970,250	$62.79	$3,139,500	$62.79	$3,139,500	$41.30	$6,195,000	$33.94	$9,427,853
Total Development Costs (TDC)		$280	$27,977,489	$432	$43,228,672	$256	$6,389,825	$264	$13,210,819		$18,503,002	$127	$19,013,526	$239	$66,459,613
Linkage Fee ($1 per GBA)	$1.00	0.429%	$100,000	0.259%	$100,000	0.566%	$25,000	0.496%	$50,000	0.325%	$50,000	1.170%	$150,000	0.487%	$308,644
		$234	$23,403,489	$387	$38,654,672	$178	$4,444,575	$202	$10,121,319	$308	$15,413,502	$86	$12,968,526	$206	$57,340,404
Linkage Fee ($5 per GBA)	$5.00	2.146%	$500,000	1.297%	$500,000	2.828%	$125,000	2.482%	$250,000	1.627%	$250,000	5.851%	$750,000	2.090%	$1,543,222
		$238	$23,803,489	$391	$39,054,672	$182	$4,544,575	$206	$10,321,319	$312	$15,613,502	$90	$13,568,526	210	$58,574,982
Equity	30%	$70	$6,991,047	$116	$11,566,402	$53.03	$1,325,872	$60.43	$3,021,396	$92.18	$4,609,051	$25.64	$3,845,558	$61.59	$17,109,528
Loan (mortgage)	70%	$163	$16,312,443	$270	$26,988,270	$123.75	$3,093,702	$141.00	$7,049,923	$215.09	$10,754,451	$59.82	$8,972,968	$798.44	$39,922,232
Revenue															
Gross Income							$750,000								
Annual Net Operating Income		$20.33	$2,032,594	$29.57	$2,956,500	$8.25	$412,500	$15.75	$787,500	$23.63	$1,181,250	$7.20	$1,080,000	$17.55	$4,875,774
Per Room or NSF			$13,551			$16.50									
CAP (3)			5.50%		5.50%		5.43%		5.44%		5.44%		4.74%		5.37%
Maximum Value		$369.56	$36,956,250	$537.55	$53,754,545	$303.87	$7,596,685	$96.51	$14,476,103	$144.76	$21,714,154	$151.90	$22,784,810		$90,796,542
Less Development Cost		-$233.03	-$23,303,489	-$385.55	-$38,554,672	-$176.78	-$4,419,575	-$67.14	-$10,071,319	-$102.42	-$15,363,502	-$85.46	-$12,818,526		-$57,031,760
Profit Before Fees (NSF)		$136.53	$13,652,761	$152.00	$15,199,874	$127.08	$3,177,111	$29.37	$4,404,784	$42.34	$6,350,653	$66.44	$9,966,284		$33,764,782
Fees as % of TDC															
No Fee			$0		$0		$0		$0		$0		$0		0
Maximum Linkage Fees		20.06%	$4,674,000	12.12%	$4,674,000	44.58%	$1,970,250	31.17%	$3,139,500	20.43%	$3,139,500	48.33%	$6,195,000	16.53%	$9,427,853
	$1.00	0.43%	$100,000	0.26%	$100,000	0.57%	$25,000	0.50%	$50,000	0.33%	$50,000	1.17%	$150,000	0.49%	$277,780
	$5.00	2.15%	$500,000	1.30%	$500,000	2.83%	$125,000	2.48%	$250,000	1.63%	$250,000	5.85%	$750,000	2.44%	$1,388,900
Equity Investment Analysis															
Equity as % TDC			30%		30%		30%		30%		30%		30%		30%
Return on Equity (ROE)			6.00%		6.00%		6.00%		6.00%		6.00%		6.00%		6.00%
No Linkage Fee (investment period in months)	20		9.76%		6.57%		11.98%		7.29%		6.89%		12.96%		9.87%
Maximum Linkage Fees (pg 61)			6.42%		4.55%		4.55%		2.09%		3.48%		4.90%		7.11%
	$1.00		9.69%		6.53%		11.89%		7.21%		6.84%		12.76%		9.79%
	$5.00		9.41%		6.35%		11.51%		6.88%		6.62%		11.98%		9.46%
Return on Cost (ROC) (4)	0.015		7.00%		7.00%		6.93%		6.94%		6.94%		6.24%		6.87%
No Fee			8.72%		7.67%		9.33%		7.82%		7.69%		8.43%		8.55%
Maximum Linkage Fees (pg 61)			7.27%		6.84%		6.46%		5.96%		6.38%		5.68%		7.34%
$1.00			8.69%		7.65%		9.28%		7.78%		7.66%		8.33%		8.50%
$5.00			8.54%		7.57%		9.08%		7.63%		7.57%		7.96%		8.32%

(1) Loopnet.com
(2) include A&E, construction financing,permits and fees, legal, accounting, insurance and developer overhead
(3) nationalcapaate/Tampa.com; second quarter 2019
(4) cap rate plus 0.015%

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CITY OF ST. PETERSBURG
WORKFORCE HOUSING NEED/NEXUS STUDY

Example of Exemptions to Nexus Fees

1. Construction upon any property which is the subject of a preexisting contractual agreement
2. Affordable housing projects that are constructed with the support of any combination of federal, state or local financial resources, including private activity bonds, tax credits, grants, loans or other subsidies to incentivize the development of affordable housing.
3. Any housing project financed or constructed by or on behalf of the Pinellas or St. Petersburg Housing Authorities
4. Residential units built by any charitable, religious, or other non-profit entity and deed restricted to ensure the affordability of the dwelling unit to low and moderate income households.
5. Nonresidential projects that are built by any charitable, religious or other nonprofit entity and that are primarily used to provide shelter, housing assistance or related services to low income households.
6. Construction by or on behalf to the Federal, State or local government to the extent any or all of the gross floor area in the structure will be used solely for a government or educational purpose
7. Any structure that is being reconstructed due to involuntary demolition or destruction including involuntary man made forces
8. An addition of four hundred (400) gross square feet or less to an existing structure containing a single unit dwelling or a two unit dwelling
9. Accessory dwelling units
10. City granted waiver or fee reduction for a nonresidential project due to proof of lack of employment impact

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WORKFORCE HOUSING NEED/NEXUS STUDY

Potential Nexus Fee Revenues

	10 Year Projection	Annual	Linkage Fee (Annual)	
Proposed Impact Fee			$1	$5
Residential	13,842,821	1,384,282	$1,384,282	$6,921,411
Office	829,130	82,913	$82,913	$414,565
Industrial	49,437	4,944	$4,944	$24,719
Hotel	557,662	55,766	$55,766	$278,831
Retail	761,238	76,124	$76,124	$380,619
Mixed Use	1,506,000	150,600	$150,600	$753,000
Non Residential other	3,248,446	324,845	$324,845	$1,624,223
Total Annual	20,794,734	2,079,473	$2,079,473	$10,397,367
Total 10 Year			**$20,794,734**	**$103,973,670**

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Committee of the Whole

COASTAL HIGH HAZARD AREA (CHHA)

October 24, 2019

PURPOSE

The purpose of this Committee of the Whole (COW) is a follow-up to the January 24, 2019 COW and the July 25, 2019 COW, to discuss matters pertaining to the Coastal High Hazard Area (CHHA), and possible text amendments to the City's Comprehensive Plan and Land Development Regulations (LDRs), see attached Staff Memos dated January 24th and July 25th. The presentation and discussion considered methods for allowing safe and reasonable increases in residential density within the CHHA, while also leading to a higher standard of construction for all new multi-family development, regardless of whether or not an increase in density was considered. Such elevated design standards are intended to result in structures which are more resilient to storm surge and sea level rise, mitigate for service and infrastructure needs during and immediately following a major storm event, and enable safe re-occupation as quickly as possible following an evacuation.

Following the July 25th COW, staff engaged a consultant to assist in cost estimates for the elevated development criteria. After a review of the estimates along with an analysis of recent multi-family projects in our City, staff revised the draft LDR amendment. The proposed CHHA Design standards were simplified to replace the proposed menu point system with a more streamlined list of requirements. Staff distributed the proposed changes on October 8th and will be holding a stakeholder meeting on October 15th. As shown in the attached latest draft, all multi-family projects will be required to do the following:

1. Prepare Hurricane Evacuation and Re-entry Plan
2. Reduce Risk for Water: elevate an additional 2-feet above the required design flood elevation, for a total of 4-feet above Base Flood Elevation (addresses both Sea Level Rise and Storm Surge)
3. Reduce Risk for Wind: construct the building to meet design requirements of next higher classification of Risk Category, e.g. increase from 145 to 155 mph standard, Category 2 to 3 storm event
4. Enhance Recovery through selection of a Resiliency option: such as provision of on-site storage of solar generated power, increased efficiency HVAC systems, or providing solar or tank-less water heating systems. Projects up to 199 units select one option, projects over 200 units select two options
5. Projects which increase density must mitigate for Hurricane Evacuation Shelter space

Attached is the latest draft of the proposed Comprehensive Plan Amendment text and Land Development Regulation text for consideration by council. Memos from the two previous COWs are also attached for reference.

NEXT STEPS

1. Adoption Public Hearings – DRC, CPPC, City Council

ATTACHMENT A: PROPOSED COMP PLAN AND LDR TEXT AMENDMENTS

ATTACHMENT B: STAFF MEMOS – COW January 24 & COW July 25, 2019

City of St. Petersburg
DRAFT Comprehensive Plan Text Amendment
October 3, 2019

Policy LU7.1 in Chapter 3, Future Land Use Element, is hereby amended to read as follows:

The City shall consider flood potential, sea level rise and hurricane hazards when processing map amendment requests in the Coastal High Hazard ("CHHA"). The City shall deny any request to amend the Future Land Use Map for property within the CHHA that results in an increase of residential density, except that the City may, at its sole and absolute discretion, consider approving such amendment based upon a balancing of the following criteria, as are determined applicable and significant to the subject amendment.

A. Access to Emergency Shelter Space and Evacuation Routes – The uses associated with the requested amendment will have access to adequate emergency shelter space as well as evacuation routes with adequate capacities and evacuation clearance times. Nothing in this policy shall be construed as superseding or otherwise modifying the local plan amendment requirement of Section 163.3178(8), Florida Statutes, as follows:

   1. The adopted level of service for out-of-county hurricane evacuation is maintained for a category 5 storm event as measured on the Saffir-Simpson scale: or

   2. A 12-hour evacuation time to shelter is maintained for a category 5 storm event as measured on the Saffir-Simpson scale and shelter space reasonably expected to accommodate the residents of the development contemplated by a proposed comprehensive plan amendment is available; or

   3. Appropriate mitigation is provided, no later than the time of development approval, that will satisfy subparagraph A or subparagraph B. Appropriate mitigation shall include, without limitation, payment of money, contribution of land, and construction of hurricane shelters and transportation facilities. Required mitigation may not exceed the amount required for a developer to accommodate impacts reasonably attributable to development. The City and a developer shall enter into a binding agreement to memorialize the mitigation plan.

B. Utilization of Existing and Planned infrastructure – The requested amendment will result in the utilization of existing infrastructure, as opposed to requiring the expenditure of public funds for the construction of new, unplanned infrastructure with the potential to be damaged by coastal storms.

C. Utilization of Existing Disturbed Areas – The requested amendment will result in the utilization of existing disturbed areas as opposed to natural areas that buffer existing development for coastal storms.

D. Maintenance of Scenic Qualities and Improvement of Public Access to Water – The requested amendment will result in the maintenance of scenic qualities, and the improvement of public access, to the Gulf of Mexico, inland waterways (such as Boca Ciega Bay), and Tampa Bay.

E. Water Dependent Use – The requested amendment is for uses which are water dependent.

F. Part of Community Redevelopment Plan - The requested amendment is included in a Community Redevelopment Plan, as defined by Florida Statutes for a downtown or other designated redevelopment areas.

DRAFT

G. Overall Reduction of Density or Intensity – The requested amendment would result in an increase in density or intensity on a single parcel, in concert with corollary amendments which result in the overall reduction of development density or intensity in the surrounding CHHA.

H. Clustering of Uses – The requested amendment within the CHHA provides for the clustering of uses on a portion of the site outside the CHHA.

I. Integral Part of Comprehensive Planning Process – The requested amendment has been initiated by the local government as an integral part of its comprehensive planning process, consistent with the local government comprehensive plan.

J. Location within an Activity Center, Target Employment Center, Special Area Plan – The requested amendment is within an existing or proposed Activity Center, Target Employment Center, or Special Area Plan.

K. Implements the Goals and Policies of the Integrated Sustainability Action Plan (ISAP), Complete Streets and Health in All Policies (HIAP) – The requested amendment incorporates design elements and programs which further the sustainability and resiliency goals and policies of the ISAP, Complete Streets and HIAP such as LEED or Florida Green Building certification, energy efficiency and reduction, solar infrastructure, Electric Vehicle charging stations, recreational amendments, on-site community garden, pet amenities, recycling program and enhancement of natural systems,

L. Reduction of Storm Vulnerable Structures – The requested amendment will result in removal of storm vulnerable structures including but not limited to mobile homes, trailers and residences constructed prior to establishment of FEMA elevation requirements.

Policy LU7.5 in Chapter 3, Future Land Use Element, is hereby deleted as follows:

~~When establishing Future Land Use Plan designations through a Comprehensive Plan amendment for annexed properties located within the Coastal High Hazard Area there shall be no net increase in residential density as compared to the Future Land Use Plan of Pinellas County designation(s) existing at the time of annexation of a property without prior written approval of the state Land planning Agency and Pinellas County.~~

Note: Criteria A-I reflect criteria currently found in the Countywide Rules and Plan; Criteria J-L are specific to St. Petersburg's proposed amendment

DRAFT

City of St. Petersburg
DRAFT CHHA LDR Code Amendment
October 8, 2019

SECTION 16.30.040. - DEVELOPMENT IN THE COASTAL HIGH HAZARD AREA (CHHA) ~~AND THE HURRICANE VULNERABILITY ZONE OVERLAY~~[9]

16.30.040.1. - Development regulations.

A. The Coastal High Hazard Area (CHHA) is the area at or below the elevation of the Category 1 storm surge line as established by the sea, lake and overland surges from hurricanes (SLOSH) computerized storm surge model. The CHHA ~~and the hurricane vulnerability zone are~~ is generally shown on the map in the coastal management element of the Comprehensive Plan. Development within these areas shall be consistent with the goals, objectives and policies of the Comprehensive Plan.

B. New construction of hospitals, nursing homes and assisted living facilities is prohibited in ~~Hurricane Evacuation Level A Zones~~ the CHHA. ~~The construction or expansion of these uses in Hurricane Evacuation Level B Zones is discouraged.~~

C. New mobile home parks are prohibited in ~~Evacuation Level A Zone~~ the CHHA.

D. Solid waste and commercial hazardous waste management facilities including regional storage, treatment or transfer sites are prohibited in the ~~hurricane vulnerability zone~~ CHHA.

E. New construction of residential multifamily dwelling units resulting from a density/intensity increase from a plan amendment after *adoption date* shall provide for hurricane shelter mitigation. Such mitigation for the impacts attributable to the development shall include one or a combination of the following: payment of a hurricane mitigation shelter fee, contribution of land, or construction of hurricane shelters. A hurricane shelter mitigation fee shall be provided prior to issuance of the certificate of occupancy for the dwelling unit(s), and calculated in accordance with the following formula: TBD. If the property owner elects to contribute land or construct hurricane shelter space, a binding agreement shall be executed regarding such mitigation prior to issuance of a building permit for construction of the residential units.

F. Construction, expansion or substantial renovations of hotel uses shall provide a Hurricane Evacuation and Closure Plan that complies with all Pinellas County and City of St. Petersburg hurricane evacuation plans and procedures to ensure orderly evacuation of guests and visitors pursuant to the Pinellas County Code, Chapter 34, Article III.

G. New construction of multi-family residential dwelling units shall provide a Hurricane Evacuation and Re-entry Plan requiring mandatory evacuation in accordance with Emergency Management Directives. The plan shall include operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power (if available), and transition back to normal operation. Such requirements shall be incorporated into a legally binding document such as lease documents, condominium rules, homeowner rules, or other such method approved by the POD.

16.30.040.2. – CHHA Design Standards.

A. Purpose: The City of St. Petersburg is committed to improving the capacity to endure and quickly recover from coastal hazards. This section is intended to ensure that developments are more resilient to storm surge and sea level rise, mitigate for service and infrastructure needs during and immediately following major storm events, and enable safe re-occupation following an evacuation or weather event.

B. New construction of multi-family residential dwelling units in the CHHA shall achieve LEED Gold certification or higher or shall comply with the following CHHA Design Standards. All projects shall provide both items from Component 1. Projects containing up to 199 units shall provide one item from Component 2. Projects containing 200 units or greater shall provide two items from Component 2.

Component 1: Risk Reduction
Elevate the finished floor with 2 feet of additional freeboard above the required design flood elevation, for a total of 4 feet of freeboard above the BFE (Base Flood Elevation)
Construct building to meet design requirements of next higher classification of Risk Category, per ASCE 7. *(e.g. increase from 145 to 155 mph standard, Category 2 to 3 storm event)*
Component 2: Recovery
On-site battery storage of solar generated power to keep critical functions working in the event of power failure
Install a cool/high-reflectance roof (coating that is white or has special reflective pigments that reflect sunlight) on at least 75% of the total roof area of the development, with a minimum SRI (solar reflectance index value) of 39 and in accordance with the standards set by the HVWZ
Install a geothermal energy heating & cooling system that serves as least 75% of the project's residential units
Pre-wire all units to accept power provided by on-site solar panels and/or wind turbines
Install a 20+ SEER HVAC system in each dwelling unit
Install a 16-19 SEER HVAC system in each dwelling unit
Install efficient, zone-controlled heating and cooling systems in each residential unit (mini-splits, or smart thermostats, etc.)
Install a solar or tank-less water heating system in each residential unit
Install no fewer than 2 operable windows on no fewer than two exterior walls in each unit
Install a generator for power generation to keep critical functions working in the event of power failure
Install highly-reflective blinds/shades, low-E window film/tint, external/structural shade to reduce solar gain
Provide for a Resilient Common Area with back-up power source to provide air-conditioning and power, food, water and emergency supplies to support residents after a storm event
Provide for a Neighborhood Resilience Hub to provide on-site and neighborhood residents point of distribution of services before and after storm events
Contribute to the Emergency Shelter Fund
Utilize mold-resistant building materials in all kitchens and baths, such as fiberglass-faced drywall, mold-resistant drywall tape, tile, ceramic, terrazzo, or stained concrete, rated "resistant" or "highly resistant" according to UL 2824 and in compliance with ASTM D 3273 standard
Protect coastal property with a living shoreline (LSL) per the US Army Corps of Engineers (USACE) Living Shoreline Permit Standard. *(LSLs use natural materials to stabilize the shoreline and maintain valuable fish and wildlife habitat; LSLs utilize a variety of materials such as wetland plants, oyster shell, coir fiber logs, sand, wood, and native rock.)*

C. Alternative Methods of Compliance: In lieu of compliance with subsection B above, for Large Tract Planned Development projects and projects which are subject to Site Plan Review, an applicant may propose an alternative method of compliance for review and approval by the DRC. The applicant will need to demonstrate that the site-specific analysis and wholistic resilient design methods meet or exceed the requirements of LEED Gold certification or the CHHA Design Standards through such methods as follows:

- Provision of a site-specific risk assessment analysis;
- Addressing infrastructure improvements such as-wet/dry proofing, raising streets and flood gates;
- Provision of park/green space which allows for standoff buffer during flood events and can be designed in tiers to provide flood capacity; and
- Inclusion of an Operations/Maintenance Component where the development/users actively prepare for an event (e.g., down draining ponds/basins, closing flood gates, etc)

DRAFT

Committee of the Whole

COASTAL HIGH HAZARD AREA (CHHA)

January 24, 2019

PURPOSE

The purpose of this Committee of the Whole (COW) is to discuss matters pertaining to the Coastal High Hazard Area (CHHA), and possible text amendments to the City's Comprehensive Plan and Land Development Regulations (LDRs). The presentation and discussion shall consider methods for allowing safe and reasonable increases in residential density within the CHHA, while also leading to a higher standard of construction that is more resilient to storm surge, mitigates for service and infrastructure needs during and immediately following a major storm event, and enables safe re-occupation as quickly as possible following an evacuation.

Commitments to support future changes or final decisions regarding proposed text is not the purpose of this meeting, rather the purpose is to have a high-level discussion that will help City staff discern future direction on several critical points. The direction learned from this meeting will help City Staff prioritize next steps, coordinate research needs and partnerships.

INTRODUCTION OF TERMS

COASTAL HIGH HAZARD AREA (CHHA). The CHHA is defined as the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake and Overland Surges from Hurricanes ("SLOSH") computerized storm surge model.

HURRICANE EVACUATION ZONES. Hurricane evacuation zones (A to E) reflect storm surge vulnerability and the appropriate evacuation level for Category 1 to 5 storm (hurricane) events.

SPECIAL FLOOD HAZARD AREAS (SFHA). The SFHA was previously known as the 100-year flood plain. These areas are identified on FEMA's Flood Insurance Rate Map. Designations within the SFHA include the V-Zone (Velocity) and A- or AE Zone (properties located in the latter have a 1% probability of flooding every year).

TIMELINE FOR CITY FILE: LGCP-2017-02

City File: LGCP-2017-02 pertains to a series of City-initiated amendments to the Future Land Use and Coastal Management elements of the Comprehensive Plan to address the City's new Coastal High Hazard Area (CHHA) boundary. The proposed amendments include adoption of the new 2016 CHHA Map, amending policies that prohibit requests for residential density increases within the CHHA, and adding balancing criteria to be considered when requests are made to increase density within the CHHA.

It cannot be emphasized enough that these proposed Comprehensive Plan text amendments, if ultimately approved, ***do not*** increase density or intensity in the CHHA. Only specific amendments to the City's Future Land Use Map and/or Official Zoning Map, if approved, will allow for an increase in density or intensity. Requests for such amendments, whether they are City-initiated or private applications, will be subjected to the City's normal application process, including public notice, CPPC and City Council public hearings, and state, regional and county review. All applications are reviewed and considered on a case-by-case basis.

Community Planning & Preservation Commission (CPPC)

On **August 8, 2017** the CPPC conducted a public hearing regarding these proposed changes, but before rendering a final decision, they requested that the language set forth in Section 163.3178(8), F.S., be added to the amendment. This section of the Florida Statutes addresses compliance of a comprehensive plan amendment with state coastal high-hazard provisions. Staff agreed to add the language, however, a final vote was not taken, and the matter was continued to a future date.

On **July 10, 2018** the CPPC conducted a new public hearing regarding these proposed amendments and voted 4 to 3 to recommend APPROVAL to City Council. Two CPPC members voiced concerns about Plan amendments or rezonings that could increase density in the CHHA.

City Council

On **August 23, 2018** the City Council's first reading and first public hearing for the ordinance addressing the proposed amendments was tabled/deferred until after a COW was convened.

BACKGROUND

How are the CHHA boundaries determined?

The CHHA boundary is determined using a computerized numerical model developed by the National Weather Service (NWS) called the Sea, Lake and Overland Surges from Hurricanes (SLOSH) model. The model estimates storm surge heights resulting from historical, hypothetical, or predicted hurricanes by considering the atmospheric pressure, size, forward speed, and track data.

NOAA's SLOSH Model web page (https://www.nhc.noaa.gov/surge/slosh.php) states that there are three different modeling methods that can be used to estimate surge. The National Hurricane Center (NHC) and Florida Emergency Management officials use the "Composite Approach" which runs several thousand times with hypothetical hurricanes under different storm conditions. The products generated from this approach are regarded by the NHC as the best approach for determining storm surge vulnerability for an area since it takes into account forecast uncertainty.

Areas included in the CHHA are governed both by state law and the policies adopted to administer those provisions in the local government comprehensive plans. To reduce loss of life and property caused by natural disasters, the State of Florida requires local governments to identify the CHHA and plan accordingly with the emphasis on reducing vulnerability to hurricane impacts (Section 163.3178, Florida

Statutes).

How long has the CHHA been around?

The CHHA has existed since 1985. The definition and applicable standards have changed several times - in 2006, 2010, and most recently 2016. The most recent changes have led to a major expansion of the CHHA and have caused the City to re-evaluate its adopted policies.

What was the size of the expansion?

The 2016 CHHA Map shows a Category 1 storm surge area of 16,328 acres, more than double the 7,705 acres identified on the 2010 Map. [See attached map.]

Why did the CHHA double in size?

The Tampa Bay Regional Planning Council's 2017 Regional Evacuation Study states that the CHHA expansion is due to an update to the Composite SLOSH model's physics parameters which now include the use of Kelvin Wave dynamics which is thought to resolve coastal reflections of surges caused by trapped Kelvin Waves. In other words, the model update accounts for variation in tide waves caused by shallow seas and coastal waters. Wave amplitude increases when Kelvin waves move into shallow water. In coastal regions, Kelvin waves can also be generated as storm surges are diffracted by vertical boundaries and scattered by irregular coastlines.

What City Comprehensive Plan policies or objectives need to be re-evaluated?

There are several Comprehensive Plan policies and objectives that need to be examined (replaced or amended), including Land Use Policy LU7.1 which states that "Requests for residential density increases within the Coastal High Hazard Zone shall not be approved," and Coastal Management Objective CM10B which states that "The City shall direct population concentrations away from known or predicted coastal high hazard areas consistent with the goals, objectives and policies of the Future Land Use Element."

A Future Land Use Map (FLUM) amendment or rezoning within the CHHA is not always about residential development; often it is about an office or retail (commercial) project. However, such an amendment or rezoning almost always allows for an increase in residential density too, as most of the future land use categories allow both. As it relates to increasing density in the CHHA, the language of Policy LU7.1 and Objective CM10B is quite different (stricter) from the language that exists in the Florida Statutes, TBRPC's Strategic Regional Policy Plan and the Countywide Plan Rules.

What general areas of the City are located within the expanded CHHA boundary?

- Innovation District and the entire Salt Creek area
- USF St. Petersburg Campus
- Skyway Marina District: both sides of 34th Street South
- Coquina Key Shopping Plaza (minor portion)
- 4th Street North, both sides between 54th Avenue North and Howard Frankland Bridge
- Dr. ML King Jr. Street North, between 62nd Avenue and Gandy Blvd.

- ASI/Progressive Insurance Headquarters (Dr. ML King Jr. Street and 94th Avenue)
- Metropointe Commerce Park and Carillon Office Park
- Jabil Headquarters Campus
- Echelon Town Center
- Several mobile home parks

If the City's Comprehensive Plan policies are not amended, what types of Future Land Use Map amendments will not be processed?

- Approximately 4,000 acres (or 27%) of the CHHA is designated Residential Low or Residential Urban, which permit a density range from 5 to 7½ units per acre. City-initiated or private applications would typically be processed to amend the designation to Residential Medium, which permits up to 15 units per acre. Such applications would not be processed due to location within the CHHA.

- Approximately 1,575 acres (or 11%) of the CHHA is designated Residential Medium or Residential/Office General, which permit up to 15 units per acre. City-initiated or private applications (especially for R/OG designated land) would typically be processed to amend the designations to Planned Redevelopment-Mixed Use, which permits up to 24 units per acre. Such applications would not be processed due to location within the CHHA.

- Finally, numerous applications, both City-initiated and private, have been processed over the years for incremental expansion of commercial zoning along 4th Street North and Dr. ML King/9th Street North, often just one lot or two, to accommodate office and retail redevelopment. The typical request would be to amend the lower density residential designation to Residential/Office General or Planned Redevelopment-Mixed Use, which permit a residential density range from 15 to 24 units per acre. Such applications would not be processed due to location within the CHHA.

Why is this expanded area, or the entire CHHA, of concern?

It is understood that CHHA residents are the first to evacuate when a tropical system or hurricane threatens Pinellas County. Evacuation times and shelter capacity are always a concern, however, a land use amendment within the CHHA is not always about residential development; often it is about accommodating an office or retail project. Prohibiting a land use amendment in a 16,000-acre area could/would arguably hamper economic development in the City, and prevent (again, arguably) rational land use amendments from being enacted.

The ability for City Council to approve, on a case-by-case basis, requests to increase density/intensity within the CHHA would be consistent with Comprehensive Plan policies that address the efficient use of existing infrastructure and encourage development and redevelopment in areas where infrastructure exists, and excess capacity is available. The *inability* to increase density/intensity within the CHHA, on a case-by-case basis, could have a negative effect on the City's economic development efforts by:

- decreasing the size of development/redevelopment projects
- reducing private financial investment/reinvestment in real property
- decreasing the number of construction and permanent jobs created

- hindering the expansion of existing businesses
- making business recruitment more difficult
- limiting potential/probable increases in the tax base
- providing less diversification of the City's economic base
- reducing the number of multifamily units constructed, leading to fewer housing choices (e.g., workforce and affordable housing)
- hindering redevelopment efforts in impacted neighborhoods and business districts
- delaying the redevelopment or replacement of structures that do not conform to flood and wind hazard construction standards

EVOLUTION OF THE CITY STAFF PROPOSAL

What is City staff proposing?

The proposed text amendments to the Comprehensive Plan include adoption of the new 2016 CHHA Map, amending policies that prohibit requests for residential density increases within the CHHA and adding balancing criteria to be considered when requests are made to increase density within the CHHA.

The balancing criteria are found in the Countywide Plan Rules, administered by Forward Pinellas. Specifically, Section 4.2.7.1 of the Countywide Plan Rules states that "the Countywide Planning Authority shall deny an amendment to the Countywide Plan Map within the CHHA which results in an increase of density or intensity; except that they may, at their sole and absolute discretion, consider approving such amendment based upon a balancing of the following criteria, as are determined applicable and significant to the subject amendment." These criteria include:

1. Access to Emergency Shelter Space and Evacuation Routes. The uses associated with the requested amendment will have access to adequate emergency shelter space as well as evacuation routes with adequate capacities and evacuation clearance times.

2. Utilization of Existing and Planned infrastructure. The requested amendment will result in the utilization of existing infrastructure, as opposed to requiring the expenditure of public funds for the construction of new, unplanned infrastructure with the potential to be damaged by coastal storms.

3. Utilization of Existing Disturbed Areas. The requested amendment will result in the utilization of existing disturbed areas as opposed to natural areas that buffer existing development for coastal storms.

4. Maintenance of Scenic Qualities and Improvement of Public Access to Water. The requested amendment will result in the maintenance of scenic qualities, and the improvement of public access, to the Gulf of Mexico, inland waterways (such as Boca Ciega Bay), and Tampa Bay.

5. Water Dependent Use. The requested amendment is for uses which are water dependent.

6. Part of Community Redevelopment Plan. The requested amendment is included in a Community Redevelopment Plan, as defined by Florida Statues for a downtown or other designated redevelopment areas.

7. Overall Reduction of Density or Intensity. The requested amendment would result in an increase in density or intensity on a single parcel, in concert with corollary amendments which result in the overall reduction of development density or intensity in the surrounding CHHA.

8. Clustering of Uses. The requested amendment within the CHHA provides for the clustering of uses on a portion of the site outside the CHHA.

9. Integral Part of Comprehensive Planning Process. The requested amendment has been initiated by the local government as an integral part of its comprehensive planning process, consistent with the local government comprehensive plan.

These nine criteria have been in the Countywide Rules since 2005. They were readopted in 2015, with a new requirement that they also be adopted locally (for those communities to whom it applies). There are 12 local governments in Pinellas County, in addition to St. Petersburg, that have addressed or are in the process of addressing the balancing criteria.

At the request of the CPPC, it is further proposed that the language set forth in Section 163.3178(8), F.S., be added to the amendment. This section of the Florida Statutes addresses compliance of a comprehensive plan amendment with state coastal high-hazard provisions. It specifically states that "A proposed comprehensive plan amendment shall be found in compliance with state coastal high–hazard provisions if:

- The adopted level of service for out-of-county hurricane evacuation is maintained for a category 5 storm event as measured on the Saffir-Simpson scale; or
- A 12-hour evacuation time to shelter is maintained for a category 5 storm event as measured on the Saffir-Simpson scale and shelter space reasonably expected to accommodate the residents of the development contemplated by a proposed comprehensive plan amendment is available; or
- **Appropriate mitigation is provided** (emphasis added) that will satisfy subparagraph 1 or subparagraph 2. Appropriate mitigation shall include, without limitation, payment of money, contribution of land, and construction of hurricane shelters and transportation facilities. Required mitigation may not exceed the amount required for a developer to accommodate impacts reasonably attributable to development. A local government and a developer shall enter into a binding agreement to memorialize the mitigation plan."

Thus, the Florida Statutes allow for the mitigation of impacts reasonably attributable to development that results from a density increase within the CHHA. In discussions with officials from the Florida Department of Economic Opportunity (DEO), Bureau of Community Planning, it was made clear that the LOS standards set forth in the state statutes could be dealt with successfully by local governments *with mitigation*, and that amendments impacting the CHHA are reviewed and considered by DEO staff on a case-by-case basis.

Consideration of Additional Balancing Criteria

City staff is recommending that two other balancing criteria be considered when increases in density are requested, in addition to the nine discussed above. They are as follows:

- Location within an Activity Center or Target Employment Center. The requested amendment area is located within a designated Activity Center or Target Employment Center.

- Furthers the Goals and Policies of the Integrated Sustainability Action Plan (ISAP). The requested amendment results in the furthering of goals and policies identified in the ISAP, including but not limited to green infrastructure, green building, and low impact design.

- Reduction of Storm Vulnerable Structures. The reduction or elimination of substandard flood hazard and wind load bearing structures will be accelerated because of the redevelopment allowed by the plan amendment.

Mandatory or Prioritized Criteria

The criteria are proposed as a balancing test *meaning* certain criteria may be weighted more than others at the discretion of the evaluator. City staff recommends that consideration be given toward making one or more criteria *mandatory*.

Mitigation: A Countywide Conversation

For several months, Planning and Development Services Department staff has been working with the City's Office of Emergency Management (St. Petersburg Fire Rescue), as well as staff from Forward Pinellas, Pinellas County Planning Department, and Pinellas County Emergency Management. An informal "working group" has been formed, and to date has met four times.

It is anticipated that the agreed upon mitigation plan (necessitated by an increase in density within the CHHA) will likely involve the payment of money to provide additional shelter space in Pinellas County, with the developer paying a "to be determined" amount of money to build more shelter spaces for the additional persons attributed to the development. Pinellas County Emergency Management will likely set up a fund to account for this money. No details have been discussed, to date.

CHAPTER 16, CITY CODE (LAND DEVELOPMENT REGULATIONS)

What City Code (LDR) changes are being considered?

Section 16.30.040 of the City Code addresses development in the Coastal High Hazard Area (CHHA). It is proposed that the following development regulations be considered:

- New construction of residential dwelling units (resulting from a density/intensity increase from a plan amendment after (date of this change) shall provide for hurricane shelter mitigation. Such mitigation for the impacts attributable to the development shall include one or a combination of

the following: payment of money, contribution of land, or construction of hurricane shelters. Payment for construction of hurricane shelter space shall be provided prior to issuance of the certificate of occupancy for the dwelling unit(s), in accordance with the following formula:

[*Formula to be Determined in Consultation with Emergency Management*]

If the property owner elects to contribute land or construct hurricane shelter space, a binding agreement shall be executed regarding such mitigation prior to issuance of a building permit for construction of the residential units.

- New construction of hotels and multi-family, residential dwelling units shall provide a Hurricane Evacuation Plan requiring mandatory evacuation in accordance with Emergency Management directives. Such requirements shall be incorporated into a legally binding document such as lease documents, condominium rules, homeowner rules, or other such method approved by the POD.

- Establish CHHA design standards based on the following model from Norfolk, Virginia.

CITY OF NORFOLK EXPERIENCE (RESILIENCE QUOTIENT SYSTEM)

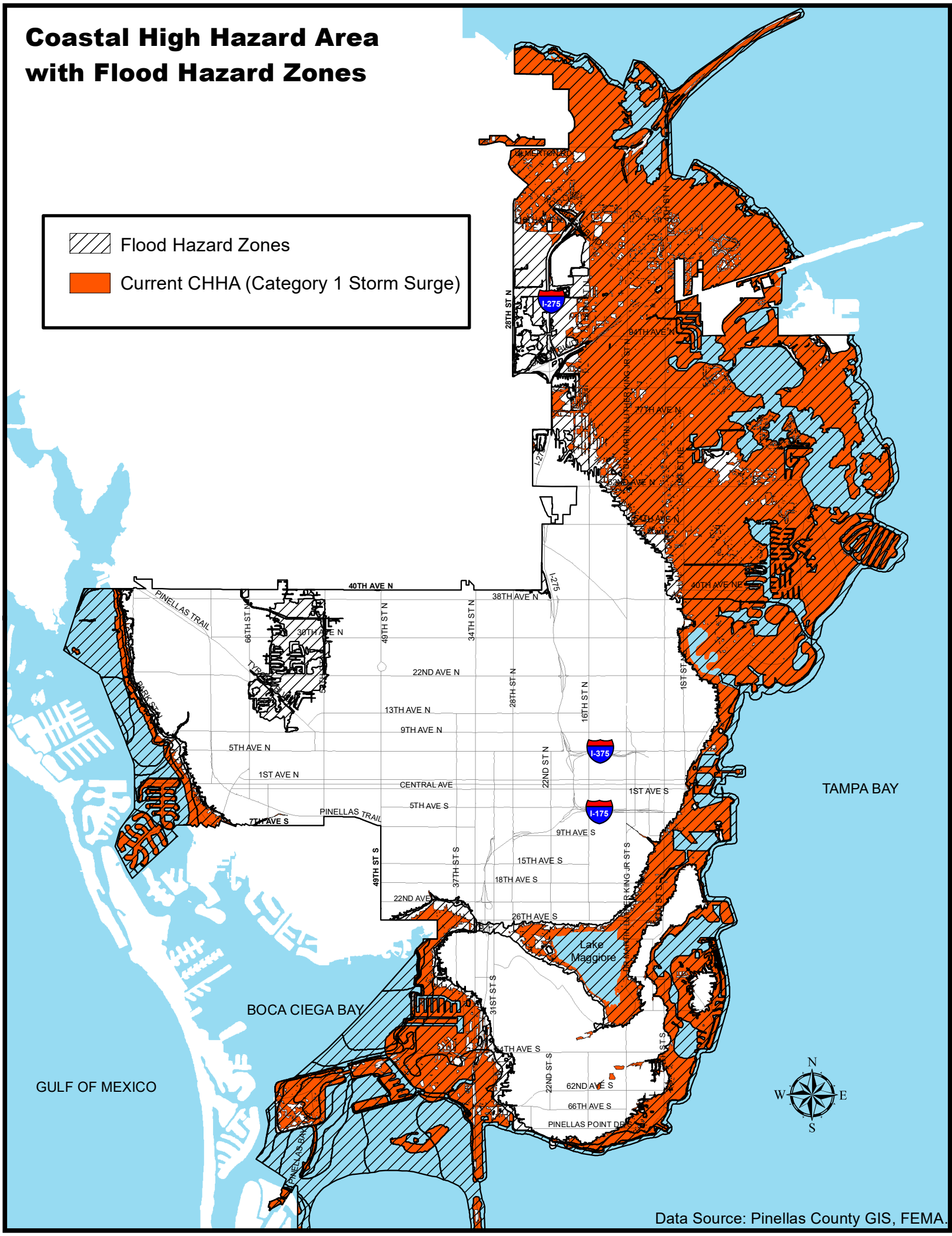
In an effort to foster more flood resilient development and redevelopment, the City of Norfolk, Virginia adopted a new zoning ordinance in January 2018, with an effective date of March 1, 2018. The ordinance includes a new *resilience quotient system,* where developers earn points for incorporating different resilient measures that promote flood risk reduction, stormwater management and energy resilience, among other practices. New development is required to meet different resilience point values based on the development type (e.g., residential, nonresidential, mixed-use) and development size (e.g., number of residential units, square footage).

Section 5.12 of the Norfolk Zoning Ordinance, titled Resilience Quotient, is attached. City staff recommends that this *overall concept* be considered for incorporation into the land development regulations. If the City Council would like to evaluate further, City staff will prepare next steps for additional research and stakeholder engagement.

If interested, City staff recommends a limited scope than refines the model with particular attention given to reducing flood risk by establishing higher standards of construction that is more resilient to storm surge, mitigates for service and infrastructure needs during and immediately following a major storm event, and enables safe re-occupation as quickly as possible following an evacuation. These needs would be considered in consultation with the City's Construction Services and Permitting staff and Certified Floodplain Manager, and City and County Emergency Management staff.

ATTACHMENT: COASTAL HIGH HAZARD MAP

Coastal High Hazard Area with Flood Hazard Zones



Data Source: Pinellas County GIS, FEMA.

ATTACHMENT: NORFOLK RESILIENCY QUOTIENT

CITY OF NORFOLK, VA
RESILIENCE QUOTIENT

5.12.1. PURPOSE

The City of Norfolk is committed to be the coastal community of the future, with the capacity to endure and quickly recover from climatic and environmental shocks and stresses and bounce back quickly and stronger. All proposed development shall be reviewed to identify how it will enhance resilience for both the development specifically and the city generally. This section is intended to ensure development practices that promote resiliency in the following ways:

A. Reduce risks from flooding;
B. Conserve energy;
C. Promote the use of alternative energy;
D. Conserve water resources;
E. Protect water quality;
F. Manager stormwater;
G. Support walkable, mixed-use development in appropriate places;
H. Support multiple modes of mobility;
I. Promote a healthy landscape;
J. Support urban agriculture; and
K. Promote healthy and safe lifestyles

5.12.2. APPLICABILITY

Unless exempted by this section, all development shall comply with the resilience quotient standards of this section.

A. EXEMPTED DEVELOPMENT

The following development is exempted from the standards of this section:

(1) New buildings or redevelopment that have achieved or will achieve LEED requirements necessary to receive certification from the U.S. Green Building Council at the gold level or above;

(2) Renovation or rehabilitation of a building constructed prior to March 1, 2018 when the cost of the work is less than 50 percent of the appraised value of the development prior to the renovation or rehabilitation; and

(3) Expansion of a building constructed prior to March 1, 2018 whose expansion is less than 50 percent of the gross floor area of the building.

(4) Historic or architecturally significant buildings which meet at least one of the following criteria:

(a) Individually listed on the US Department of the Interior's National Register of Historic Places; or
(b) Individually listed in the Virginia Landmarks Register; or
(c) Noted as a contributing structure in a district listed within the US Department of the Interior's National Register of Historic Places or the Virginia Landmarks Register or a local historic district designated in accordance with this Ordinance; or

(d) Designated as a Norfolk Historic Landmark in accordance with Section 3.9.20, HL: Historic Landmark Designation.

5.12.3. TIMING OF REVIEW

Review for compliance with the standards of this section shall occur during review of a development application for either a conditional rezoning (see Section 2.4.4, Conditional Rezoning), planned development (see Section 2.4.5, Planned Development District), conditional use (see Section 2.4.8, Conditional Use Permit), site plan (see Section 2.4.18, Major Site Plan, or Section 2.4.19, Minor Site Plan), or Zoning Certificate (see Section 2.4.14, Zoning Certificate), as appropriate.

A. GENERALLY

Unless an alternative option is specified below, all new development and redevelopment to which the resilience quotient applies shall undergo site plan review during which the following conditions shall be reviewed and addressed:

(1) Reducing risks from flooding;
(2) Managing stormwater;
(3) Promoting energy resilience including the use of alternative energy;
(4) Conserving water resources and protecting water quality;
(5) Supporting multiple modes of mobility, specifically including walkability and bikeability;
(6) Developing in a manner that promotes healthy and safe environments and lifestyles; and
(7) Providing inclusionary dwelling units within mixed-income residential or mixed-use developments.

B. DOCUMENTATION REQUIRED

Applicants shall provide documentation of techniques that will be utilized to satisfy the requirements of this section at the time of submittal of a development application. Documentation for items that may not be visually verified as part of an inspection may be provided in the form of invoices, receipts, or delivery confirmation for the items in question.

C. INSTALLATION AND MAINTENANCE OF RESILIENCE QUOTIENT DEVELOPMENT ACTIVITIES REQUIRED

All Resilient Development Activities approved as a part of a development shall be installed, maintained and perpetuated. Failure to do so shall be a violation of this Ordinance and subject to the remedies and penalties prescribed in Article 7, Enforcement.

D. DETERMINATION OF COMPLIANCE

The ZA shall determine whether the Resilient Development Activities proposed meet the requirements of this Ordinance. In carrying out this responsibility, the ZA may seek advice and counsel from other City staff and outside subject matter experts prior to issuing a determination. To the extent practicable, all determinations shall be rendered in writing stating the reasons therefor.

5.12.5. RESILIENCE QUOTIENT COMPLIANCE FOR SINGLE FAMILY DEVELOPMENT

A. APPLICABILITY

Any proposed development that includes only single family detached dwellings may elect to comply with the resilience quotient standards for single family development in this subsection in lieu of the site plan review process established in Section 5.12.4, Compliance with Resilience Quotient Standards, above.

(1) Risk Reduction
The lowest habitable floor and all significant electrical and mechanical equipment shall be elevated at least 16 inches above the highest adjacent grade unless a greater elevation is required by the provisions of the FPCH-O district.

(2) Stormwater Management
Roof drainage shall be intercepted and detained on site within a system providing no less than 200 gallons of total storage capacity; these requirements shall be memorialized in an agreement in lieu of a plan for stormwater.

(3) Energy Resilience
The electrical systems of the dwelling shall be designed with pre-installed wiring and connections to allow use of a generator during electricity outages and/or connection of solar, wind, or other locally-generated electricity source.

The ZA, for good cause shown, may authorize in writing minor deviations from the above requirements that achieve the same resilience goals to an equal or greater extent.

5.12.6. RESILIENCE QUOTIENT COMPLIANCE FOR MULTIPLE DWELLING UNIT RESIDENTIAL DEVELOPMENT

A. APPLICABILITY

The following types of development shall comply with the resilience quotient standards of this subsection:

(1) Any proposed multi-family residential development other than one or two single family dwellings not part of a common plan of development; or

(2) Any proposed development that includes one or more dwelling units as part of a mixed-use development. In this case, the standards of this subsection shall apply only to the residential portion of the development.

B. GENERALLY

Any multi-family residential development shall fully address all of the factors in Section 5.12.4, Compliance with Resilience Quotient Standards, during site plan review and shall comply with the following standards in so doing:

(1) The lowest habitable floor and all significant electrical and mechanical equipment shall be elevated at least 16 inches above the highest adjacent grade unless a greater elevation is required by the provisions of the FPCH-O district.

(2) 100% of the drainage from impervious surfaces on the site shall be captured and retained on site with sufficient storage to keep the first 1.25 inches of rainwater from an individual rain event on site without discharging onto neighboring properties or rights-of-way unless a regional stormwater management system is available to the development and the specific discharges into it have been approved by the Director of Public Works.

C. ALTERNATIVE MINIMUM REQUIREMENTS

Any multiple dwelling unit residential development may elect to comply with the resilience quotient standards for residential development in this subsection in lieu of the portion of the site plan review process established in Section 5.12.4, Compliance with Resilience Quotient Standards, above. The point system provides options within each of three components and each development shall achieve a minimum number of points from the menu of options shown in Table 5.12.6, Resilient Point System for Residential Development, based on the number of dwelling units within the development as shown below.

(1) 1 to 5 units: 4 points total, no less than 1 point per component.
(2) 6 to 29 units: 5 points total, no less than 1.5 points per component.
(3) 30 to 89 units: 6 points total, no less than 1.5 points per component.
(4) 90 to 199 units: 8 points total, no less than 2 points per component.
(5) 200 or more units: 10 points total, no less than 2 points per component.

Any actions taken to meet the general requirements of Section 5.12.6.B for which points are available shall be included when tabulating the number of points achieved within each component.

TABLE 5.12.6: RESILIENT POINT SYSTEM FOR RESIDENTIAL DEVELOPMENT	
Resilient Development Activity	**Points Earned**
Component 1: Risk Reduction	
Construct building to meet 110-mile wind load design requirements of the VUSBC	2.00
Elevate the ground story finished floor and all significant electrical and mechanical equipment no less than 3 feet above highest adjacent grade	1.00, plus 0.50 per ft. above 3 ft.
Construct an impact-resistant (hail, tree damage) roof	0.50
Install impact (hurricane or wind) resistant windows	0.50
Install operable storm shutters	0.50
Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation	0.50
Component 2: Stormwater Management	
Install a green roof on at least 50 percent of the total roof area (25 percent for renovated buildings) and only plant materials permitted in Section 5.2, Landscaping Standards	2.00
Install a green roof on at least 25 percent of the total roof area and only plant materials permitted in Section 5.2, Landscaping Standards	1.00
Provide rain gardens, street-side swales, soil and turf management or other appropriate storm water infiltration system(s) to capture and infiltrate a minimum of 25 percent of site-generated stormwater	1.00
Use pervious or grass paving systems on at least 50% of parking lot and driveway area in the development	1.00
Provide a fenced, centrally-located community garden space (which may be located as a rooftop garden) for residents and for urban gardening purposes at a ratio of 50 square feet per residential dwelling unit	1.00
Retain at least 20 percent of existing pre-development natural, non-exotic vegetation	0.75
Provide a percentage of open space greater than that required in Table 5.5.4(A), Required Open Space Set-Asides	0.50 per additional 5% preserved
For new tree plantings, enhance tree pits with specially engineered soils and native plants to absorb and filter runoff	0.25
Preserve large, non-exotic trees on site (large tree defined as 20 feet or greater in height and 24 inches or greater DBH)	0.10 per tree preserved
Component 3: Energy Resilience	
Generate no less than 75% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	3.00

TABLE 5.12.6: RESILIENT POINT SYSTEM FOR RESIDENTIAL DEVELOPMENT	
Generate no less than 50% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	2.00
Install a cool roof on at least 50 percent of the total roof area of the development	1.50
Generat no less than 25% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	1.00
Generate no less than 25% of the electricity needed expected to be used by the development from on-site solar and/or wind energy sources	1.00
Install a geothermal energy heating & cooling system serving all residential units and common areas	1.00
Install a conditioned crawlspace under each primary structure	1.00
Install green walls on a minimum of 50 percent of the primary building's walls	1.00
Adopt an energy efficient site lighting budget (based on the International Dark Sky Association's designations for allowable lumens per square foot of specified use or type of hardscape)	1.00
Equip the project with at least one alternative, independent source of electricity supply so that the project is capable of fully operating if a primary source of power experiences interruption	1.00
Pre-wire all dwelling units to accept power provided by on-site solar panels and/or wind turbines	1.00
Install a 20+ SEER HVAC system in each dwelling unit	1.00
Re-use or repurpose an historic building that is listed on a national, state, or local register, or at least 75% (based on surface area) of existing historic structures	1.00
Install a cool roof on at least 25 percent of the total roof area of the development	0.75
Install a 16-19 SEER HVAC system in each dwelling unit	0.50
Install multi-room mini-split heating and cooling systems in each dwelling unit	0.50
Install a solar or tank-less water heating system in each dwelling unit	0.50
Install no fewer than 2 operable windows on no fewer than two exterior walls in each dwelling unit	0.50
Install a generator for power generation to keep critical functions (refrigerator, freezer, basic lighting, healthcare appliances, etc.) working in the event of power failure	0.50
Provide shade, open-grid pervious pavement, or solar-reflective paving on 50% of total area of roads, sidewalks, and parking areas in the development	0.50
Provide electric vehicle (EV) level 3 charging stations, located in a parking structure or off-street parking lot, that are made available for use by residents	0.50 for every two stations
Plant vegetation so that 50% of the eastern and western building facades are shaded at noontime on the summer solstice within 10 years of planting	0.50
Use vegetation or vegetated structures to shade each dwelling's HVAC unit	0.25

TABLE 5.12.6: RESILIENT POINT SYSTEM FOR RESIDENTIAL DEVELOPMENT	
Automatically turn off all outdoor signage and lighting between the hours of 10:00 p.m. and 7:00 a.m. except for security lighting	0.25
Provide a minimum of five percent of required automobile parking spaces that are signed and reserved for hybrid/electric/low energy vehicles in preferred locations near primary building entrances	0.25
Provide electric vehicle (EV) level 2 charging stations, located in a parking structure or off-street parking lot, that are made available for use by residents	0.25 for every two stations
Re-use or repurpose an existing non-historic building, or at least 75% (based on surface area) of existing structures	0.25
Install highly-reflective blinds/shades to reduce solar gain	0.25

5.12.7. RESILIENCE QUOTIENT COMPLIANCE FOR NON-RESIDENTIAL DEVELOPMENT

A. APPLICABILITY

Any proposed development that includes non-residential development. In the case of mixed-use development, the standards of this subsection shall only apply to the non-residential portion of the development.

B. GENERALLY

Any non-residential development to which the resilience quotient is applicable shall fully address all of the factors in Section 5.12.4, Compliance with Resilience Quotient Standards, during site plan review and shall comply with the following standards in so doing:

(1) The lowest habitable floor and all significant electrical and mechanical equipment shall be elevated at least 8 inches above the highest adjacent grade unless a greater elevation is required by the provisions of the FPCH-O district.

(2) 100% of the drainage from impervious surfaces on the site shall be captured and retained on site with sufficient storage to keep the first 1.25 inches of rainwater from an individual rain event on site without discharging onto neighboring properties or rights-of-way unless a regional stormwater management system is available to the development and the specific discharges into it have been approved by the Director of Public Works.

C. ALTERNATIVE MINIMUM REQUIREMENTS

Any non-residential development may elect to comply with the resilience quotient standards for non-residential development in this subsection in lieu of the portion of the site plan review process established in Section 5.12.4, Compliance with Resilience Quotient Standards, above. The point system provides options within each of three components and each development shall achieve a minimum number of points from the menu of options shown in Table 5.12.7.

(1) Less than 10,000 sq. ft.: 3 points total, no less than 1 point per component.
(2) 10,000 to 25,000 sq. ft.: 4 points total, no less than 1.5 points per component.
(3) 25,000 to 50,000 sq. ft.: 6 points total, no less than 1.5 points per component.
(4) Above 50,000 sq. ft.: 10 points total, no less than 2 points per component.

Any actions taken to meet the general requirements of Section 5.12.7.B, Generally, for which points are available shall be included when tabulating the number of points achieved within each component.

TABLE 5.12.7.: RESILIENT POINT SYSTEM FOR NON-RESIDENTIAL DEVELOPMENT	
Resilient Development Activity	**Points Earned**
Component 1: Risk Reduction	
Construct building to meet 110-mile wind load design requirements of the VUSBC	2.00
Equip the project with at least one alternative, independent source of electricity supply so that the project is fully capable of operating if a primary source of power experiences an interruption	1.50
If the project involves a critical facility that is intended to remain operational in the event of a flood, or whose function is critical for post-flood recovery, design the facility to be protected and operable at the water levels represented by a 0.2% annual chance (500-year) flood	1.00
Elevate the ground story finished floor and all significant electrical and mechanical equipment no less than 3 feet above highest adjacent grade or to an elevation of 11 (NAVD '88)	1.00, plus 0.50 per ft. above 3 ft.
Install a generator for power generation in the event of power failure sufficient to keep critical operations functional	0.50
Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation	0.50
Component 2: Stormwater Management	
Install a green roof on at least 50 percent of the total roof area (25 percent for renovated buildings) and only plant materials permitted in Section 5.2, Landscaping Standards	2.00
Install a green roof on at least 25 percent of the total roof area and only plant materials permitted in Section 5.2, Landscaping Standards	1.00
Provide rain gardens, street-side swales, turf and soil management or other appropriate storm water infiltration system(s) to capture and infiltrate a minimum of 25 percent of site generated stormwater	1.00
Use pervious pavement on at least 50% of parking lot and driveway area in development	1.00

TABLE 5.12.7.: RESILIENT POINT SYSTEM FOR NON-RESIDENTIAL DEVELOPMENT	
Retain at least 20 percent of existing pre-development natural, non-exotic vegetation	0.75
Provide a percentage of open space greater than that required in Table 5.5.4.A, Required Open Space Set-Asides	0.50 per additional 5% preserved
For new tree plantings, enhance tree pits with specially engineered soils and native plants to absorb and filter runoff	0.25
Preserve large, non-exotic trees on site (large tree defined as 20 feet or greater in height and 24 inches or greater DBH)	0.10 per tree preserved
Component 3: Energy Resilience	
Generate no less than 75% of the electricity expected to be used by the development from solar and/or wind energy sources	3.00
Generate no less than 50% of the electricity expected to be used by the development from solar and/or wind energy sources	2.00
Install a cool roof on at least 50 percent of the total roof area of the development	1.50
Generate no less than 25% of the electricity expected to be used by the development from solar and/or wind energy sources	1.00
Install a geothermal heating and cooling system serving all parts of the project	1.00
Install a conditioned crawlspace under each primary structure	1.00
Install green walls on a minimum of 50 percent of the primary building's walls	1.00
Install 20+ SEER HVAC systems throughout the project	1.00
Re-use or repurpose an historic building that is listed on a national, state, or local register, or at least 75% (based on surface area) of existing historic structures	1.00
Preserve or provide trees on the site which will within 10 years growing time will provide tree canopy over no less than 50% of the total site	1.00
Install a cool roof on at least 25 percent of the total roof area of the development	0.75
Install 16-19 SEER HVAC systems throughout the project	0.50
Install mini-split heating and cooling systems throughout the project	0.50
Install solar or tank-less water heating systems throughout	0.50
Provide shade, open-grid pervious pavement, or solar-reflective paving on 50% of total area of roads, sidewalks, and parking areas in the development	0.50
Provide electric vehicle (EV) level 3 charging stations, located in a parking structure or off-street parking lot, that are made available for use by users of the project	0.50 for every two stations
Plant vegetation so that 50% of the eastern and western building facades are shaded at noontime on the summer solstice within 10 years of planting	0.50
Orient buildings within 20 percent of east-west axis for maximum solar exposure	0.50

TABLE 5.12.7.: RESILIENT POINT SYSTEM FOR NON-RESIDENTIAL DEVELOPMENT	
Provide operable windows on at least 2 façades on each floor which provide flow-through ventilation	0.25
Use vegetation or vegetated structures to shade HVAC units	0.25
Automatically turn off all outdoor signage and lighting between the hours of 10:00 p.m. and 7:00 a.m. except for security lighting	0.25
Provide a minimum of five percent of required automobile parking spaces that are signed and reserved for carpools, hybrid, electric, and low energy vehicles in preferred locations near primary building entrances	0.25
Provide electric vehicle (EV) level 2 charging stations, located in a parking structure or off-street parking lot, that are made available for use by users of the project	0.25 for every two stations
Re-use or repurpose an existing non-historic building, or at least 75% (based on surface area) of existing structures	0.25
Install highly-reflective blinds/shades to reduce solar gain	0.25
Provide skylights in an amount necessary to ensure natural lighting is provided to at least 25 percent of the habitable rooms in the structure	0.25, plus

5.12.8. MINOR DEVIATION FROM RESILIENCE QUOTIENT COMPLIANCE

A. APPLICABILITY

Any proposed development subject to the resilience quotient provisions and electing to utilize the point system in lieu of having the resilience quotient be fully reviewed and implemented as a part of the site plan review process may propose minor deviations or alternative Resilient Development Activities for consideration.

B. ZONING ADMINISTRATOR AUTHORITY

(1) The ZA, for good cause shown, may authorize in writing minor deviations from the resilient quotient requirements specified in the sections above provided that those resilience goals are still achieved to an equal or greater extent.

(2) Any proposed deviation determined by the ZA to be more than a minor deviation shall not be approved by the ZA and the development shall, instead, utilize the site plan review process for a complete review of the resilience quotient factors contained in Section 5.12.4, Compliance with Resilience Quotient Standards.

(3) The ZA shall review any alternative Resilient Development Activities that may be proposed and, if determined in writing that the alternative Resilient Development Activities will achieve the same resilience goals to an equal or greater extent, the ZA will assign point value(s) to the alternative Activities. The ZA shall maintain an online log of all approved alternative Resilient Development Activities and the point value assigned.

Committee of the Whole

COASTAL HIGH HAZARD AREA (CHHA)

July 25, 2019

PURPOSE

The purpose of this Committee of the Whole (COW) is a follow-up to the January 24, 2019 COW, to discuss matters pertaining to the Coastal High Hazard Area (CHHA), and possible text amendments to the City's Comprehensive Plan and Land Development Regulations (LDRs), see attached Staff Memo dated January 24th. The presentation and discussion considered methods for allowing safe and reasonable increases in residential density within the CHHA, while also leading to a higher standard of construction for all new multi-family development, regardless of whether or not an increase in density was considered. Such elevated design standards are intended to result in structures which are more resilient to storm surge and sea level rise, mitigate for service and infrastructure needs during and immediately following a major storm event, and enable safe re-occupation as quickly as possible following an evacuation.

Following the January 24th COW, staff prepared a draft LDR amendment for stakeholder review. Staff presented the proposed Comprehensive Plan and LDR changes to the St. Pete Ocean Team on April 23rd and held a stakeholder meeting on May 21st. The City was also awarded a grant from the Urban Land Institute (ULI) for technical assistance in developing these innovative zoning and development standards to ensure that coastal developments are more resilient to various coastal hazards. The ULI Technical Advisory Committee convened on June 18th and 19th'and the final technical memo is attached.

The ULI report references consideration of sea level rise, which will be incorporated into the proposed design standards. In support of the proposed elevation requirements, a report prepared by the Tampa Bay Climate Science Advisory Panel, dated April 2019, is attached, titled "Recommended Projections of Sea Level Rise in the Tampa Bay Region". The report recommends NOAA Low projections not be utilized for Planning Purposes.

Staff incorporated changes to the proposed LDR text amendment based on information from further research and feedback from stakeholders and the ULI committee. Attached is the latest draft of the proposed Comprehensive Plan Amendment text and Land Development Regulation text for consideration by council.

NEXT STEPS

1. Refine Proposed LDR CHHA Design Standards amendment and provide for further stakeholder review (August/September):
    - Provide cost estimates for the elevated development criteria
    - Provide points required for unit ranges
    - Provide points earned for elevated

2. Schedule for COW (October 24th)/Adoption Public Hearings

ATTACHMENT A: STAFF MEMO – COW January 24, 2019

Committee of the Whole

COASTAL HIGH HAZARD AREA (CHHA)

January 24, 2019

PURPOSE

The purpose of this Committee of the Whole (COW) is to discuss matters pertaining to the Coastal High Hazard Area (CHHA), and possible text amendments to the City's Comprehensive Plan and Land Development Regulations (LDRs). The presentation and discussion shall consider methods for allowing safe and reasonable increases in residential density within the CHHA, while also leading to a higher standard of construction that is more resilient to storm surge, mitigates for service and infrastructure needs during and immediately following a major storm event, and enables safe re-occupation as quickly as possible following an evacuation.

Commitments to support future changes or final decisions regarding proposed text is not the purpose of this meeting, rather the purpose is to have a high-level discussion that will help City staff discern future direction on several critical points. The direction learned from this meeting will help City Staff prioritize next steps, coordinate research needs and partnerships.

INTRODUCTION OF TERMS

COASTAL HIGH HAZARD AREA (CHHA). The CHHA is defined as the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake and Overland Surges from Hurricanes ("SLOSH") computerized storm surge model.

HURRICANE EVACUATION ZONES. Hurricane evacuation zones (A to E) reflect storm surge vulnerability and the appropriate evacuation level for Category 1 to 5 storm (hurricane) events.

SPECIAL FLOOD HAZARD AREAS (SFHA). The SFHA was previously known as the 100-year flood plain. These areas are identified on FEMA's Flood Insurance Rate Map. Designations within the SFHA include the V-Zone (Velocity) and A- or AE Zone (properties located in the latter have a 1% probability of flooding every year).

TIMELINE FOR CITY FILE: LGCP-2017-02

City File: LGCP-2017-02 pertains to a series of City-initiated amendments to the Future Land Use and Coastal Management elements of the Comprehensive Plan to address the City's new Coastal High Hazard Area (CHHA) boundary. The proposed amendments include adoption of the new 2016 CHHA Map, amending policies that prohibit requests for residential density increases within the CHHA, and adding balancing criteria to be considered when requests are made to increase density within the CHHA.

It cannot be emphasized enough that these proposed Comprehensive Plan text amendments, if ultimately approved, ***do not*** increase density or intensity in the CHHA. Only specific amendments to the City's Future Land Use Map and/or Official Zoning Map, if approved, will allow for an increase in density or intensity. Requests for such amendments, whether they are City-initiated or private applications, will be subjected to the City's normal application process, including public notice, CPPC and City Council public hearings, and state, regional and county review. All applications are reviewed and considered on a case-by-case basis.

Community Planning & Preservation Commission (CPPC)

On **August 8, 2017** the CPPC conducted a public hearing regarding these proposed changes, but before rendering a final decision, they requested that the language set forth in Section 163.3178(8), F.S., be added to the amendment. This section of the Florida Statutes addresses compliance of a comprehensive plan amendment with state coastal high-hazard provisions. Staff agreed to add the language, however, a final vote was not taken, and the matter was continued to a future date.

On **July 10, 2018** the CPPC conducted a new public hearing regarding these proposed amendments and voted 4 to 3 to recommend APPROVAL to City Council. Two CPPC members voiced concerns about Plan amendments or rezonings that could increase density in the CHHA.

City Council

On **August 23, 2018** the City Council's first reading and first public hearing for the ordinance addressing the proposed amendments was tabled/deferred until after a COW was convened.

BACKGROUND

How are the CHHA boundaries determined?

The CHHA boundary is determined using a computerized numerical model developed by the National Weather Service (NWS) called the Sea, Lake and Overland Surges from Hurricanes (SLOSH) model. The model estimates storm surge heights resulting from historical, hypothetical, or predicted hurricanes by considering the atmospheric pressure, size, forward speed, and track data.

NOAA's SLOSH Model web page (https://www.nhc.noaa.gov/surge/slosh.php) states that there are three different modeling methods that can be used to estimate surge. The National Hurricane Center (NHC) and Florida Emergency Management officials use the "Composite Approach" which runs several thousand times with hypothetical hurricanes under different storm conditions. The products generated from this approach are regarded by the NHC as the best approach for determining storm surge vulnerability for an area since it takes into account forecast uncertainty.

Areas included in the CHHA are governed both by state law and the policies adopted to administer those provisions in the local government comprehensive plans. To reduce loss of life and property caused by natural disasters, the State of Florida requires local governments to identify the CHHA and plan accordingly with the emphasis on reducing vulnerability to hurricane impacts (Section 163.3178, Florida

Statutes).

How long has the CHHA been around?

The CHHA has existed since 1985. The definition and applicable standards have changed several times - in 2006, 2010, and most recently 2016. The most recent changes have led to a major expansion of the CHHA and have caused the City to re-evaluate its adopted policies.

What was the size of the expansion?

The 2016 CHHA Map shows a Category 1 storm surge area of 16,328 acres, more than double the 7,705 acres identified on the 2010 Map. [See attached map.]

Why did the CHHA double in size?

The Tampa Bay Regional Planning Council's 2017 Regional Evacuation Study states that the CHHA expansion is due to an update to the Composite SLOSH model's physics parameters which now include the use of Kelvin Wave dynamics which is thought to resolve coastal reflections of surges caused by trapped Kelvin Waves. In other words, the model update accounts for variation in tide waves caused by shallow seas and coastal waters. Wave amplitude increases when Kelvin waves move into shallow water. In coastal regions, Kelvin waves can also be generated as storm surges are diffracted by vertical boundaries and scattered by irregular coastlines.

What City Comprehensive Plan policies or objectives need to be re-evaluated?

There are several Comprehensive Plan policies and objectives that need to be examined (replaced or amended), including Land Use Policy LU7.1 which states that "Requests for residential density increases within the Coastal High Hazard Zone shall not be approved," and Coastal Management Objective CM10B which states that "The City shall direct population concentrations away from known or predicted coastal high hazard areas consistent with the goals, objectives and policies of the Future Land Use Element."

A Future Land Use Map (FLUM) amendment or rezoning within the CHHA is not always about residential development; often it is about an office or retail (commercial) project. However, such an amendment or rezoning almost always allows for an increase in residential density too, as most of the future land use categories allow both. As it relates to increasing density in the CHHA, the language of Policy LU7.1 and Objective CM10B is quite different (stricter) from the language that exists in the Florida Statutes, TBRPC's Strategic Regional Policy Plan and the Countywide Plan Rules.

What general areas of the City are located within the expanded CHHA boundary?

- Innovation District and the entire Salt Creek area
- USF St. Petersburg Campus
- Skyway Marina District: both sides of 34th Street South
- Coquina Key Shopping Plaza (minor portion)
- 4th Street North, both sides between 54th Avenue North and Howard Frankland Bridge
- Dr. ML King Jr. Street North, between 62nd Avenue and Gandy Blvd.

- ASI/Progressive Insurance Headquarters (Dr. ML King Jr. Street and 94th Avenue)
- Metropointe Commerce Park and Carillon Office Park
- Jabil Headquarters Campus
- Echelon Town Center
- Several mobile home parks

If the City's Comprehensive Plan policies are not amended, what types of Future Land Use Map amendments will not be processed?

- Approximately 4,000 acres (or 27%) of the CHHA is designated Residential Low or Residential Urban, which permit a density range from 5 to 7½ units per acre. City-initiated or private applications would typically be processed to amend the designation to Residential Medium, which permits up to 15 units per acre. Such applications would not be processed due to location within the CHHA.

- Approximately 1,575 acres (or 11%) of the CHHA is designated Residential Medium or Residential/Office General, which permit up to 15 units per acre. City-initiated or private applications (especially for R/OG designated land) would typically be processed to amend the designations to Planned Redevelopment-Mixed Use, which permits up to 24 units per acre. Such applications would not be processed due to location within the CHHA.

- Finally, numerous applications, both City-initiated and private, have been processed over the years for incremental expansion of commercial zoning along 4th Street North and Dr. ML King/9th Street North, often just one lot or two, to accommodate office and retail redevelopment. The typical request would be to amend the lower density residential designation to Residential/Office General or Planned Redevelopment-Mixed Use, which permit a residential density range from 15 to 24 units per acre. Such applications would not be processed due to location within the CHHA.

Why is this expanded area, or the entire CHHA, of concern?

It is understood that CHHA residents are the first to evacuate when a tropical system or hurricane threatens Pinellas County. Evacuation times and shelter capacity are always a concern, however, a land use amendment within the CHHA is not always about residential development; often it is about accommodating an office or retail project. Prohibiting a land use amendment in a 16,000-acre area could/would arguably hamper economic development in the City, and prevent (again, arguably) rational land use amendments from being enacted.

The ability for City Council to approve, on a case-by-case basis, requests to increase density/intensity within the CHHA would be consistent with Comprehensive Plan policies that address the efficient use of existing infrastructure and encourage development and redevelopment in areas where infrastructure exists, and excess capacity is available. The *inability* to increase density/intensity within the CHHA, on a case-by-case basis, could have a negative effect on the City's economic development efforts by:

- decreasing the size of development/redevelopment projects
- reducing private financial investment/reinvestment in real property
- decreasing the number of construction and permanent jobs created

- hindering the expansion of existing businesses
- making business recruitment more difficult
- limiting potential/probable increases in the tax base
- providing less diversification of the City's economic base
- reducing the number of multifamily units constructed, leading to fewer housing choices (e.g., workforce and affordable housing)
- hindering redevelopment efforts in impacted neighborhoods and business districts
- delaying the redevelopment or replacement of structures that do not conform to flood and wind hazard construction standards

EVOLUTION OF THE CITY STAFF PROPOSAL

What is City staff proposing?

The proposed text amendments to the Comprehensive Plan include adoption of the new 2016 CHHA Map, amending policies that prohibit requests for residential density increases within the CHHA and adding balancing criteria to be considered when requests are made to increase density within the CHHA.

The balancing criteria are found in the Countywide Plan Rules, administered by Forward Pinellas. Specifically, Section 4.2.7.1 of the Countywide Plan Rules states that "the Countywide Planning Authority shall deny an amendment to the Countywide Plan Map within the CHHA which results in an increase of density or intensity; except that they may, at their sole and absolute discretion, consider approving such amendment based upon a balancing of the following criteria, as are determined applicable and significant to the subject amendment." These criteria include:

1. Access to Emergency Shelter Space and Evacuation Routes. The uses associated with the requested amendment will have access to adequate emergency shelter space as well as evacuation routes with adequate capacities and evacuation clearance times.

2. Utilization of Existing and Planned infrastructure. The requested amendment will result in the utilization of existing infrastructure, as opposed to requiring the expenditure of public funds for the construction of new, unplanned infrastructure with the potential to be damaged by coastal storms.

3. Utilization of Existing Disturbed Areas. The requested amendment will result in the utilization of existing disturbed areas as opposed to natural areas that buffer existing development for coastal storms.

4. Maintenance of Scenic Qualities and Improvement of Public Access to Water. The requested amendment will result in the maintenance of scenic qualities, and the improvement of public access, to the Gulf of Mexico, inland waterways (such as Boca Ciega Bay), and Tampa Bay.

5. Water Dependent Use. The requested amendment is for uses which are water dependent.

6. Part of Community Redevelopment Plan. The requested amendment is included in a Community Redevelopment Plan, as defined by Florida Statues for a downtown or other designated redevelopment areas.

7. Overall Reduction of Density or Intensity. The requested amendment would result in an increase in density or intensity on a single parcel, in concert with corollary amendments which result in the overall reduction of development density or intensity in the surrounding CHHA.

8. Clustering of Uses. The requested amendment within the CHHA provides for the clustering of uses on a portion of the site outside the CHHA.

9. Integral Part of Comprehensive Planning Process. The requested amendment has been initiated by the local government as an integral part of its comprehensive planning process, consistent with the local government comprehensive plan.

These nine criteria have been in the Countywide Rules since 2005. They were readopted in 2015, with a new requirement that they also be adopted locally (for those communities to whom it applies). There are 12 local governments in Pinellas County, in addition to St. Petersburg, that have addressed or are in the process of addressing the balancing criteria.

At the request of the CPPC, it is further proposed that the language set forth in Section 163.3178(8), F.S., be added to the amendment. This section of the Florida Statutes addresses compliance of a comprehensive plan amendment with state coastal high-hazard provisions. It specifically states that "A proposed comprehensive plan amendment shall be found in compliance with state coastal high–hazard provisions if:

- The adopted level of service for out-of-county hurricane evacuation is maintained for a category 5 storm event as measured on the Saffir-Simpson scale; or
- A 12-hour evacuation time to shelter is maintained for a category 5 storm event as measured on the Saffir-Simpson scale and shelter space reasonably expected to accommodate the residents of the development contemplated by a proposed comprehensive plan amendment is available; or
- **Appropriate mitigation is provided** (emphasis added) that will satisfy subparagraph 1 or subparagraph 2. Appropriate mitigation shall include, without limitation, payment of money, contribution of land, and construction of hurricane shelters and transportation facilities. Required mitigation may not exceed the amount required for a developer to accommodate impacts reasonably attributable to development. A local government and a developer shall enter into a binding agreement to memorialize the mitigation plan."

Thus, the Florida Statutes allow for the mitigation of impacts reasonably attributable to development that results from a density increase within the CHHA. In discussions with officials from the Florida Department of Economic Opportunity (DEO), Bureau of Community Planning, it was made clear that the LOS standards set forth in the state statutes could be dealt with successfully by local governments *with mitigation*, and that amendments impacting the CHHA are reviewed and considered by DEO staff on a case-by-case basis.

Consideration of Additional Balancing Criteria

City staff is recommending that two other balancing criteria be considered when increases in density are requested, in addition to the nine discussed above. They are as follows:

- Location within an Activity Center or Target Employment Center. The requested amendment area is located within a designated Activity Center or Target Employment Center.

- Furthers the Goals and Policies of the Integrated Sustainability Action Plan (ISAP). The requested amendment results in the furthering of goals and policies identified in the ISAP, including but not limited to green infrastructure, green building, and low impact design.

- Reduction of Storm Vulnerable Structures. The reduction or elimination of substandard flood hazard and wind load bearing structures will be accelerated because of the redevelopment allowed by the plan amendment.

Mandatory or Prioritized Criteria

The criteria are proposed as a balancing test *meaning* certain criteria may be weighted more than others at the discretion of the evaluator. City staff recommends that consideration be given toward making one or more criteria *mandatory*.

Mitigation: A Countywide Conversation

For several months, Planning and Development Services Department staff has been working with the City's Office of Emergency Management (St. Petersburg Fire Rescue), as well as staff from Forward Pinellas, Pinellas County Planning Department, and Pinellas County Emergency Management. An informal "working group" has been formed, and to date has met four times.

It is anticipated that the agreed upon mitigation plan (necessitated by an increase in density within the CHHA) will likely involve the payment of money to provide additional shelter space in Pinellas County, with the developer paying a "to be determined" amount of money to build more shelter spaces for the additional persons attributed to the development. Pinellas County Emergency Management will likely set up a fund to account for this money. No details have been discussed, to date.

CHAPTER 16, CITY CODE (LAND DEVELOPMENT REGULATIONS)

What City Code (LDR) changes are being considered?

Section 16.30.040 of the City Code addresses development in the Coastal High Hazard Area (CHHA). It is proposed that the following development regulations be considered:

- New construction of residential dwelling units (resulting from a density/intensity increase from a plan amendment after (date of this change) shall provide for hurricane shelter mitigation. Such mitigation for the impacts attributable to the development shall include one or a combination of

the following: payment of money, contribution of land, or construction of hurricane shelters. Payment for construction of hurricane shelter space shall be provided prior to issuance of the certificate of occupancy for the dwelling unit(s), in accordance with the following formula:

[*Formula to be Determined in Consultation with Emergency Management*]

If the property owner elects to contribute land or construct hurricane shelter space, a binding agreement shall be executed regarding such mitigation prior to issuance of a building permit for construction of the residential units.

- New construction of hotels and multi-family, residential dwelling units shall provide a Hurricane Evacuation Plan requiring mandatory evacuation in accordance with Emergency Management directives. Such requirements shall be incorporated into a legally binding document such as lease documents, condominium rules, homeowner rules, or other such method approved by the POD.

- Establish CHHA design standards based on the following model from Norfolk, Virginia.

CITY OF NORFOLK EXPERIENCE (RESILIENCE QUOTIENT SYSTEM)

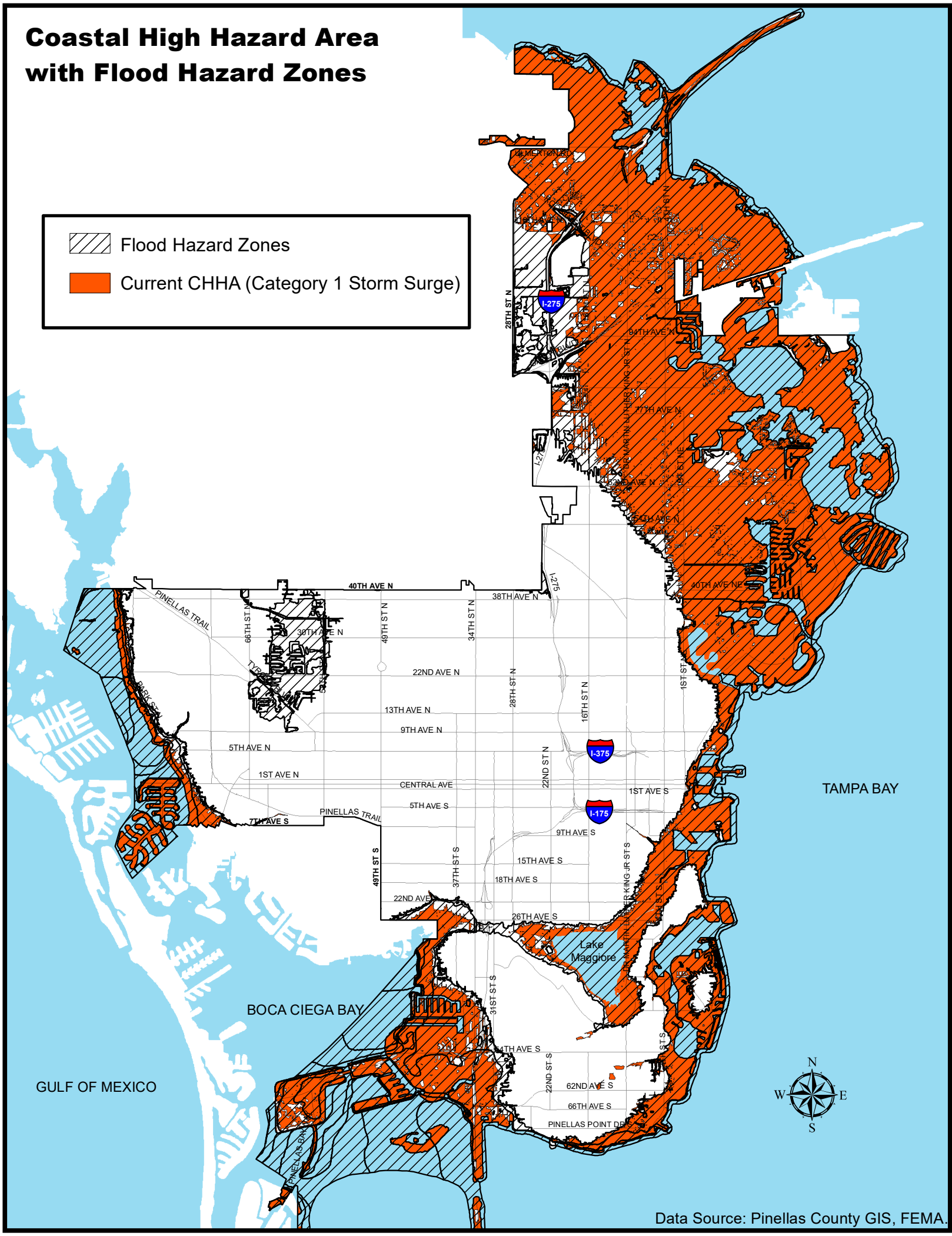
In an effort to foster more flood resilient development and redevelopment, the City of Norfolk, Virginia adopted a new zoning ordinance in January 2018, with an effective date of March 1, 2018. The ordinance includes a new *resilience quotient system,* where developers earn points for incorporating different resilient measures that promote flood risk reduction, stormwater management and energy resilience, among other practices. New development is required to meet different resilience point values based on the development type (e.g., residential, nonresidential, mixed-use) and development size (e.g., number of residential units, square footage).

Section 5.12 of the Norfolk Zoning Ordinance, titled Resilience Quotient, is attached. City staff recommends that this *overall concept* be considered for incorporation into the land development regulations. If the City Council would like to evaluate further, City staff will prepare next steps for additional research and stakeholder engagement.

If interested, City staff recommends a limited scope than refines the model with particular attention given to reducing flood risk by establishing higher standards of construction that is more resilient to storm surge, mitigates for service and infrastructure needs during and immediately following a major storm event, and enables safe re-occupation as quickly as possible following an evacuation. These needs would be considered in consultation with the City's Construction Services and Permitting staff and Certified Floodplain Manager, and City and County Emergency Management staff.

ATTACHMENT: COASTAL HIGH HAZARD MAP

Coastal High Hazard Area with Flood Hazard Zones



Data Source: Pinellas County GIS, FEMA.

ATTACHMENT: NORFOLK RESILIENCY QUOTIENT

CITY OF NORFOLK, VA
RESILIENCE QUOTIENT

5.12.1. PURPOSE

The City of Norfolk is committed to be the coastal community of the future, with the capacity to endure and quickly recover from climatic and environmental shocks and stresses and bounce back quickly and stronger. All proposed development shall be reviewed to identify how it will enhance resilience for both the development specifically and the city generally. This section is intended to ensure development practices that promote resiliency in the following ways:

A. Reduce risks from flooding;
B. Conserve energy;
C. Promote the use of alternative energy;
D. Conserve water resources;
E. Protect water quality;
F. Manager stormwater;
G. Support walkable, mixed-use development in appropriate places;
H. Support multiple modes of mobility;
I. Promote a healthy landscape;
J. Support urban agriculture; and
K. Promote healthy and safe lifestyles

5.12.2. APPLICABILITY

Unless exempted by this section, all development shall comply with the resilience quotient standards of this section.

A. EXEMPTED DEVELOPMENT

The following development is exempted from the standards of this section:

(1) New buildings or redevelopment that have achieved or will achieve LEED requirements necessary to receive certification from the U.S. Green Building Council at the gold level or above;

(2) Renovation or rehabilitation of a building constructed prior to March 1, 2018 when the cost of the work is less than 50 percent of the appraised value of the development prior to the renovation or rehabilitation; and

(3) Expansion of a building constructed prior to March 1, 2018 whose expansion is less than 50 percent of the gross floor area of the building.

(4) Historic or architecturally significant buildings which meet at least one of the following criteria:

(a) Individually listed on the US Department of the Interior's National Register of Historic Places; or
(b) Individually listed in the Virginia Landmarks Register; or
(c) Noted as a contributing structure in a district listed within the US Department of the Interior's National Register of Historic Places or the Virginia Landmarks Register or a local historic district designated in accordance with this Ordinance; or

(d) Designated as a Norfolk Historic Landmark in accordance with Section 3.9.20, HL: Historic Landmark Designation.

5.12.3. TIMING OF REVIEW

Review for compliance with the standards of this section shall occur during review of a development application for either a conditional rezoning (see Section 2.4.4, Conditional Rezoning), planned development (see Section 2.4.5, Planned Development District), conditional use (see Section 2.4.8, Conditional Use Permit), site plan (see Section 2.4.18, Major Site Plan, or Section 2.4.19, Minor Site Plan), or Zoning Certificate (see Section 2.4.14, Zoning Certificate), as appropriate.

A. GENERALLY

Unless an alternative option is specified below, all new development and redevelopment to which the resilience quotient applies shall undergo site plan review during which the following conditions shall be reviewed and addressed:

(1) Reducing risks from flooding;
(2) Managing stormwater;
(3) Promoting energy resilience including the use of alternative energy;
(4) Conserving water resources and protecting water quality;
(5) Supporting multiple modes of mobility, specifically including walkability and bikeability;
(6) Developing in a manner that promotes healthy and safe environments and lifestyles; and
(7) Providing inclusionary dwelling units within mixed-income residential or mixed-use developments.

B. DOCUMENTATION REQUIRED

Applicants shall provide documentation of techniques that will be utilized to satisfy the requirements of this section at the time of submittal of a development application. Documentation for items that may not be visually verified as part of an inspection may be provided in the form of invoices, receipts, or delivery confirmation for the items in question.

C. INSTALLATION AND MAINTENANCE OF RESILIENCE QUOTIENT DEVELOPMENT ACTIVITIES REQUIRED

All Resilient Development Activities approved as a part of a development shall be installed, maintained and perpetuated. Failure to do so shall be a violation of this Ordinance and subject to the remedies and penalties prescribed in Article 7, Enforcement.

D. DETERMINATION OF COMPLIANCE

The ZA shall determine whether the Resilient Development Activities proposed meet the requirements of this Ordinance. In carrying out this responsibility, the ZA may seek advice and counsel from other City staff and outside subject matter experts prior to issuing a determination. To the extent practicable, all determinations shall be rendered in writing stating the reasons therefor.

5.12.5. RESILIENCE QUOTIENT COMPLIANCE FOR SINGLE FAMILY DEVELOPMENT

A. APPLICABILITY

Any proposed development that includes only single family detached dwellings may elect to comply with the resilience quotient standards for single family development in this subsection in lieu of the site plan review process established in Section 5.12.4, Compliance with Resilience Quotient Standards, above.

(1) Risk Reduction
The lowest habitable floor and all significant electrical and mechanical equipment shall be elevated at least 16 inches above the highest adjacent grade unless a greater elevation is required by the provisions of the FPCH-O district.

(2) Stormwater Management
Roof drainage shall be intercepted and detained on site within a system providing no less than 200 gallons of total storage capacity; these requirements shall be memorialized in an agreement in lieu of a plan for stormwater.

(3) Energy Resilience
The electrical systems of the dwelling shall be designed with pre-installed wiring and connections to allow use of a generator during electricity outages and/or connection of solar, wind, or other locally-generated electricity source.

The ZA, for good cause shown, may authorize in writing minor deviations from the above requirements that achieve the same resilience goals to an equal or greater extent.

5.12.6. RESILIENCE QUOTIENT COMPLIANCE FOR MULTIPLE DWELLING UNIT RESIDENTIAL DEVELOPMENT

A. APPLICABILITY

The following types of development shall comply with the resilience quotient standards of this subsection:

(1) Any proposed multi-family residential development other than one or two single family dwellings not part of a common plan of development; or

(2) Any proposed development that includes one or more dwelling units as part of a mixed-use development. In this case, the standards of this subsection shall apply only to the residential portion of the development.

B. GENERALLY

Any multi-family residential development shall fully address all of the factors in Section 5.12.4, Compliance with Resilience Quotient Standards, during site plan review and shall comply with the following standards in so doing:

(1) The lowest habitable floor and all significant electrical and mechanical equipment shall be elevated at least 16 inches above the highest adjacent grade unless a greater elevation is required by the provisions of the FPCH-O district.

(2) 100% of the drainage from impervious surfaces on the site shall be captured and retained on site with sufficient storage to keep the first 1.25 inches of rainwater from an individual rain event on site without discharging onto neighboring properties or rights-of-way unless a regional stormwater management system is available to the development and the specific discharges into it have been approved by the Director of Public Works.

C. ALTERNATIVE MINIMUM REQUIREMENTS

Any multiple dwelling unit residential development may elect to comply with the resilience quotient standards for residential development in this subsection in lieu of the portion of the site plan review process established in Section 5.12.4, Compliance with Resilience Quotient Standards, above. The point system provides options within each of three components and each development shall achieve a minimum number of points from the menu of options shown in Table 5.12.6, Resilient Point System for Residential Development, based on the number of dwelling units within the development as shown below.

(1) 1 to 5 units: 4 points total, no less than 1 point per component.
(2) 6 to 29 units: 5 points total, no less than 1.5 points per component.
(3) 30 to 89 units: 6 points total, no less than 1.5 points per component.
(4) 90 to 199 units: 8 points total, no less than 2 points per component.
(5) 200 or more units: 10 points total, no less than 2 points per component.

Any actions taken to meet the general requirements of Section 5.12.6.B for which points are available shall be included when tabulating the number of points achieved within each component.

TABLE 5.12.6: RESILIENT POINT SYSTEM FOR RESIDENTIAL DEVELOPMENT	
Resilient Development Activity	**Points Earned**
Component 1: Risk Reduction	
Construct building to meet 110-mile wind load design requirements of the VUSBC	2.00
Elevate the ground story finished floor and all significant electrical and mechanical equipment no less than 3 feet above highest adjacent grade	1.00, plus 0.50 per ft. above 3 ft.
Construct an impact-resistant (hail, tree damage) roof	0.50
Install impact (hurricane or wind) resistant windows	0.50
Install operable storm shutters	0.50
Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation	0.50
Component 2: Stormwater Management	
Install a green roof on at least 50 percent of the total roof area (25 percent for renovated buildings) and only plant materials permitted in Section 5.2, Landscaping Standards	2.00
Install a green roof on at least 25 percent of the total roof area and only plant materials permitted in Section 5.2, Landscaping Standards	1.00
Provide rain gardens, street-side swales, soil and turf management or other appropriate storm water infiltration system(s) to capture and infiltrate a minimum of 25 percent of site-generated stormwater	1.00
Use pervious or grass paving systems on at least 50% of parking lot and driveway area in the development	1.00
Provide a fenced, centrally-located community garden space (which may be located as a rooftop garden) for residents and for urban gardening purposes at a ratio of 50 square feet per residential dwelling unit	1.00
Retain at least 20 percent of existing pre-development natural, non-exotic vegetation	0.75
Provide a percentage of open space greater than that required in Table 5.5.4(A), Required Open Space Set-Asides	0.50 per additional 5% preserved
For new tree plantings, enhance tree pits with specially engineered soils and native plants to absorb and filter runoff	0.25
Preserve large, non-exotic trees on site (large tree defined as 20 feet or greater in height and 24 inches or greater DBH)	0.10 per tree preserved
Component 3: Energy Resilience	
Generate no less than 75% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	3.00

TABLE 5.12.6: RESILIENT POINT SYSTEM FOR RESIDENTIAL DEVELOPMENT	
Generate no less than 50% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	2.00
Install a cool roof on at least 50 percent of the total roof area of the development	1.50
Generat no less than 25% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	1.00
Generate no less than 25% of the electricity needed expected to be used by the development from on-site solar and/or wind energy sources	1.00
Install a geothermal energy heating & cooling system serving all residential units and common areas	1.00
Install a conditioned crawlspace under each primary structure	1.00
Install green walls on a minimum of 50 percent of the primary building's walls	1.00
Adopt an energy efficient site lighting budget (based on the International Dark Sky Association's designations for allowable lumens per square foot of specified use or type of hardscape)	1.00
Equip the project with at least one alternative, independent source of electricity supply so that the project is capable of fully operating if a primary source of power experiences interruption	1.00
Pre-wire all dwelling units to accept power provided by on-site solar panels and/or wind turbines	1.00
Install a 20+ SEER HVAC system in each dwelling unit	1.00
Re-use or repurpose an historic building that is listed on a national, state, or local register, or at least 75% (based on surface area) of existing historic structures	1.00
Install a cool roof on at least 25 percent of the total roof area of the development	0.75
Install a 16-19 SEER HVAC system in each dwelling unit	0.50
Install multi-room mini-split heating and cooling systems in each dwelling unit	0.50
Install a solar or tank-less water heating system in each dwelling unit	0.50
Install no fewer than 2 operable windows on no fewer than two exterior walls in each dwelling unit	0.50
Install a generator for power generation to keep critical functions (refrigerator, freezer, basic lighting, healthcare appliances, etc.) working in the event of power failure	0.50
Provide shade, open-grid pervious pavement, or solar-reflective paving on 50% of total area of roads, sidewalks, and parking areas in the development	0.50
Provide electric vehicle (EV) level 3 charging stations, located in a parking structure or off-street parking lot, that are made available for use by residents	0.50 for every two stations
Plant vegetation so that 50% of the eastern and western building facades are shaded at noontime on the summer solstice within 10 years of planting	0.50
Use vegetation or vegetated structures to shade each dwelling's HVAC unit	0.25

TABLE 5.12.6: RESILIENT POINT SYSTEM FOR RESIDENTIAL DEVELOPMENT	
Automatically turn off all outdoor signage and lighting between the hours of 10:00 p.m. and 7:00 a.m. except for security lighting	0.25
Provide a minimum of five percent of required automobile parking spaces that are signed and reserved for hybrid/electric/low energy vehicles in preferred locations near primary building entrances	0.25
Provide electric vehicle (EV) level 2 charging stations, located in a parking structure or off-street parking lot, that are made available for use by residents	0.25 for every two stations
Re-use or repurpose an existing non-historic building, or at least 75% (based on surface area) of existing structures	0.25
Install highly-reflective blinds/shades to reduce solar gain	0.25

5.12.7. RESILIENCE QUOTIENT COMPLIANCE FOR NON-RESIDENTIAL DEVELOPMENT

A. APPLICABILITY

Any proposed development that includes non-residential development. In the case of mixed-use development, the standards of this subsection shall only apply to the non-residential portion of the development.

B. GENERALLY

Any non-residential development to which the resilience quotient is applicable shall fully address all of the factors in Section 5.12.4, Compliance with Resilience Quotient Standards, during site plan review and shall comply with the following standards in so doing:

(1) The lowest habitable floor and all significant electrical and mechanical equipment shall be elevated at least 8 inches above the highest adjacent grade unless a greater elevation is required by the provisions of the FPCH-O district.

(2) 100% of the drainage from impervious surfaces on the site shall be captured and retained on site with sufficient storage to keep the first 1.25 inches of rainwater from an individual rain event on site without discharging onto neighboring properties or rights-of-way unless a regional stormwater management system is available to the development and the specific discharges into it have been approved by the Director of Public Works.

C. ALTERNATIVE MINIMUM REQUIREMENTS

Any non-residential development may elect to comply with the resilience quotient standards for non-residential development in this subsection in lieu of the portion of the site plan review process established in Section 5.12.4, Compliance with Resilience Quotient Standards, above. The point system provides options within each of three components and each development shall achieve a minimum number of points from the menu of options shown in Table 5.12.7.

(1) Less than 10,000 sq. ft.: 3 points total, no less than 1 point per component.
(2) 10,000 to 25,000 sq. ft.: 4 points total, no less than 1.5 points per component.
(3) 25,000 to 50,000 sq. ft.: 6 points total, no less than 1.5 points per component.
(4) Above 50,000 sq. ft.: 10 points total, no less than 2 points per component.

Any actions taken to meet the general requirements of Section 5.12.7.B, Generally, for which points are available shall be included when tabulating the number of points achieved within each component.

TABLE 5.12.7.: RESILIENT POINT SYSTEM FOR NON-RESIDENTIAL DEVELOPMENT	
Resilient Development Activity	**Points Earned**
Component 1: Risk Reduction	
Construct building to meet 110-mile wind load design requirements of the VUSBC	2.00
Equip the project with at least one alternative, independent source of electricity supply so that the project is fully capable of operating if a primary source of power experiences an interruption	1.50
If the project involves a critical facility that is intended to remain operational in the event of a flood, or whose function is critical for post-flood recovery, design the facility to be protected and operable at the water levels represented by a 0.2% annual chance (500-year) flood	1.00
Elevate the ground story finished floor and all significant electrical and mechanical equipment no less than 3 feet above highest adjacent grade or to an elevation of 11 (NAVD '88)	1.00, plus 0.50 per ft. above 3 ft.
Install a generator for power generation in the event of power failure sufficient to keep critical operations functional	0.50
Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation	0.50
Component 2: Stormwater Management	
Install a green roof on at least 50 percent of the total roof area (25 percent for renovated buildings) and only plant materials permitted in Section 5.2, Landscaping Standards	2.00
Install a green roof on at least 25 percent of the total roof area and only plant materials permitted in Section 5.2, Landscaping Standards	1.00
Provide rain gardens, street-side swales, turf and soil management or other appropriate storm water infiltration system(s) to capture and infiltrate a minimum of 25 percent of site generated stormwater	1.00
Use pervious pavement on at least 50% of parking lot and driveway area in development	1.00

TABLE 5.12.7.: RESILIENT POINT SYSTEM FOR NON-RESIDENTIAL DEVELOPMENT	
Retain at least 20 percent of existing pre-development natural, non-exotic vegetation	0.75
Provide a percentage of open space greater than that required in Table 5.5.4.A, Required Open Space Set-Asides	0.50 per additional 5% preserved
For new tree plantings, enhance tree pits with specially engineered soils and native plants to absorb and filter runoff	0.25
Preserve large, non-exotic trees on site (large tree defined as 20 feet or greater in height and 24 inches or greater DBH)	0.10 per tree preserved
Component 3: Energy Resilience	
Generate no less than 75% of the electricity expected to be used by the development from solar and/or wind energy sources	3.00
Generate no less than 50% of the electricity expected to be used by the development from solar and/or wind energy sources	2.00
Install a cool roof on at least 50 percent of the total roof area of the development	1.50
Generate no less than 25% of the electricity expected to be used by the development from solar and/or wind energy sources	1.00
Install a geothermal heating and cooling system serving all parts of the project	1.00
Install a conditioned crawlspace under each primary structure	1.00
Install green walls on a minimum of 50 percent of the primary building's walls	1.00
Install 20+ SEER HVAC systems throughout the project	1.00
Re-use or repurpose an historic building that is listed on a national, state, or local register, or at least 75% (based on surface area) of existing historic structures	1.00
Preserve or provide trees on the site which will within 10 years growing time will provide tree canopy over no less than 50% of the total site	1.00
Install a cool roof on at least 25 percent of the total roof area of the development	0.75
Install 16-19 SEER HVAC systems throughout the project	0.50
Install mini-split heating and cooling systems throughout the project	0.50
Install solar or tank-less water heating systems throughout	0.50
Provide shade, open-grid pervious pavement, or solar-reflective paving on 50% of total area of roads, sidewalks, and parking areas in the development	0.50
Provide electric vehicle (EV) level 3 charging stations, located in a parking structure or off-street parking lot, that are made available for use by users of the project	0.50 for every two stations
Plant vegetation so that 50% of the eastern and western building facades are shaded at noontime on the summer solstice within 10 years of planting	0.50
Orient buildings within 20 percent of east-west axis for maximum solar exposure	0.50

TABLE 5.12.7.: RESILIENT POINT SYSTEM FOR NON-RESIDENTIAL DEVELOPMENT	
Provide operable windows on at least 2 façades on each floor which provide flow-through ventilation	0.25
Use vegetation or vegetated structures to shade HVAC units	0.25
Automatically turn off all outdoor signage and lighting between the hours of 10:00 p.m. and 7:00 a.m. except for security lighting	0.25
Provide a minimum of five percent of required automobile parking spaces that are signed and reserved for carpools, hybrid, electric, and low energy vehicles in preferred locations near primary building entrances	0.25
Provide electric vehicle (EV) level 2 charging stations, located in a parking structure or off-street parking lot, that are made available for use by users of the project	0.25 for every two stations
Re-use or repurpose an existing non-historic building, or at least 75% (based on surface area) of existing structures	0.25
Install highly-reflective blinds/shades to reduce solar gain	0.25
Provide skylights in an amount necessary to ensure natural lighting is provided to at least 25 percent of the habitable rooms in the structure	0.25, plus

5.12.8. MINOR DEVIATION FROM RESILIENCE QUOTIENT COMPLIANCE

A. APPLICABILITY

Any proposed development subject to the resilience quotient provisions and electing to utilize the point system in lieu of having the resilience quotient be fully reviewed and implemented as a part of the site plan review process may propose minor deviations or alternative Resilient Development Activities for consideration.

B. ZONING ADMINISTRATOR AUTHORITY

(1) The ZA, for good cause shown, may authorize in writing minor deviations from the resilient quotient requirements specified in the sections above provided that those resilience goals are still achieved to an equal or greater extent.

(2) Any proposed deviation determined by the ZA to be more than a minor deviation shall not be approved by the ZA and the development shall, instead, utilize the site plan review process for a complete review of the resilience quotient factors contained in Section 5.12.4, Compliance with Resilience Quotient Standards.

(3) The ZA shall review any alternative Resilient Development Activities that may be proposed and, if determined in writing that the alternative Resilient Development Activities will achieve the same resilience goals to an equal or greater extent, the ZA will assign point value(s) to the alternative Activities. The ZA shall maintain an online log of all approved alternative Resilient Development Activities and the point value assigned.

ATTACHMENT B: PROPOSED COMP PLAN AND LDR TEXT AMENDMENTS

City of St. Petersburg
DRAFT Comprehensive Plan Text Amendment

Policy LU7.1 in Chapter 3, Future Land Use Element, is hereby amended to read as follows:

The City shall consider flood potential, sea level rise and hurricane hazards when processing map amendment requests in the Coastal High Hazard ("CHHA"). The City shall deny any request to amend the Future Land Use Map for property within the CHHA that results in an increase of residential density, except that the City may, at its sole and absolute discretion, consider approving such amendment based upon a balancing of the following criteria, as are determined applicable and significant to the subject amendment.

A. Nothing in this policy shall be construed as superseding or otherwise modifying the local plan amendment requirement of Section 163.3178(8), Florida Statutes, as follows:

   1. The adopted level of service for out-of-county hurricane evacuation is maintained for a category 5 storm event as measured on the Saffir-Simpson scale: or

   2. A 12-hour evacuation time to shelter is maintained for a category 5 storm event as measured on the Saffir-Simpson scale and shelter space reasonably expected to accommodate the residents of the development contemplated by a proposed comprehensive plan amendment is available; or

   3. Appropriate mitigation is provided, no later than the time of development approval, that will satisfy subparagraph A or subparagraph B. Appropriate mitigation shall include, without limitation, payment of money, contribution of land, and construction of hurricane shelters and transportation facilities. Required mitigation may not exceed the amount required for a developer to accommodate impacts reasonably attributable to development. The City and a developer shall enter into a binding agreement to memorialize the mitigation plan.

B. Access to Emergency Shelter Space and Evacuation Routes – The uses associated with the requested amendment will have access to adequate emergency shelter space as well as evacuation routes with adequate capacities and evacuation clearance times.

C. Utilization of Existing and Planned infrastructure – The requested amendment will result in the utilization of existing infrastructure, as opposed to requiring the expenditure of public funds for the construction of new, unplanned infrastructure with the potential to be damaged by coastal storms.

D. Utilization of Existing Disturbed Areas – The requested amendment will result in the utilization of existing disturbed areas as opposed to natural areas that buffer existing development for coastal storms.

E. Maintenance of Scenic Qualities and Improvement of Public Access to Water – The requested amendment will result in the maintenance of scenic qualities, and the improvement of public access, to the Gulf of Mexico, inland waterways (such as Boca Ciega Bay), and Tampa Bay.

F. Water Dependent Use – The requested amendment is for uses which are water dependent.

G. Part of Community Redevelopment Plan - The requested amendment is included in a Community Redevelopment Plan, as defined by Florida Statutes for a downtown or other designated redevelopment areas.

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H. Overall Reduction of Density or Intensity – The requested amendment would result in an increase in density or intensity on a single parcel, in concert with corollary amendments which result in the overall reduction of development density or intensity in the surrounding CHHA.

I. Clustering of Uses – The requested amendment within the CHHA provides for the clustering of uses on a portion of the site outside the CHHA.

J. Integral Part of Comprehensive Planning Process – The requested amendment has been initiated by the local government as an integral part of its comprehensive planning process, consistent with the local government comprehensive plan.

K. Location within an Activity Center or Target Employment Center – The requested amendment is within an existing or proposed Activity Center or Target Employment Center

L. Implements the Goals and Policies of the Integrated Sustainability Action Plan (ISAP), Complete Streets and Health in All Policies (HIAP) – The requested amendment incorporates design elements and programs which further the sustainability and resiliency goals and policies of the ISAP, Complete Streets and HIAP such as LEED or Florida Green Building certification, energy efficiency and reduction, solar infrastructure, Electric Vehicle charging stations, recreational amendments, on-site community garden, pet amenities, recycling program and enhancement of natural systems,

M. Reduction of Storm Vulnerable Structures – The requested amendment will result in removal of storm vulnerable structures including but not limited to mobile homes, trailers and residences constructed prior to establishment of FEMA elevation requirements.

Policy LU7.5 in Chapter 3, Future Land Use Element, is hereby deleted as follows:

~~When establishing Future Land Use Plan designations through a Comprehensive Plan amendment for annexed properties located within the Coastal High Hazard Area there shall be no net increase in residential density as compared to the Future Land Use Plan of Pinellas County designation(s) existing at the time of annexation of a property without prior written approval of the state Land planning Agency and Pinellas County.~~

Note: Criteria A-J reflect criteria currently found in the Countywide Rules and Plan; Criteria K-M are specific to St. Petersburg's proposed amendment

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City of St. Petersburg
DRAFT CHHA LDR Code Amendment

SECTION 16.30.040. - DEVELOPMENT IN THE COASTAL HIGH HAZARD AREA (CHHA) ~~AND THE HURRICANE VULNERABILITY ZONE OVERLAY[9]~~

16.30.040.1. - Development regulations.

A. The Coastal High Hazard Area (CHHA) is the area at or below the elevation of the Category 1 storm surge line as established by the sea, lake and overland surges from hurricanes (SLOSH) computerized storm surge model. The CHHA ~~and the hurricane vulnerability zone are~~ is generally shown on the map in the coastal management element of the Comprehensive Plan. Development within these areas shall be consistent with the goals, objectives and policies of the Comprehensive Plan.

B. New construction of hospitals, nursing homes and assisted living facilities is prohibited in ~~Hurricane Evacuation Level A Zones~~ the CHHA. ~~The construction or expansion of these uses in Hurricane Evacuation Level B Zones is discouraged.~~

C. New mobile home parks are prohibited in ~~Evacuation Level A Zone~~ the CHHA.

D. Solid waste and commercial hazardous waste management facilities including regional storage, treatment or transfer sites are prohibited in the ~~hurricane vulnerability zone~~ CHHA.

E. New construction of residential multifamily dwelling units resulting from a density/intensity increase from a plan amendment after *adoption date* shall provide for hurricane shelter mitigation. Such mitigation for the impacts attributable to the development shall include one or a combination of the following: payment of a hurricane mitigation shelter fee, contribution of land, or construction of hurricane shelters. A hurricane shelter mitigation fee shall be provided prior to issuance of the certificate of occupancy for the dwelling unit(s), and calculated in accordance with the following formula: TBD. If the property owner elects to contribute land or construct hurricane shelter space, a binding agreement shall be executed regarding such mitigation prior to issuance of a building permit for construction of the residential units.

F. Construction, expansion or substantial renovations of hotel uses shall provide a Hurricane Evacuation and Closure Plan that complies with all Pinellas County and City of St. Petersburg hurricane evacuation plans and procedures to ensure orderly evacuation of guests and visitors pursuant to the Pinellas County Code, Chapter 34, Article III.

G. New construction of multi-family residential dwelling units shall provide a Hurricane Evacuation and Re-entry Plan requiring mandatory evacuation in accordance with Emergency Management Directives. The plan shall include operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation. Such requirements shall be incorporated into a legally binding document such as lease documents, condominium rules, homeowner rules, or other such method approved by the POD.

16.30.040.2. – CHHA Design Standards.

A. Purpose: The City of St. Petersburg is committed to improving the capacity to endure and quickly recover from coastal hazards. This section is intended to ensure that developments are more resilient to storm surge and sea level rise, mitigate for service and infrastructure needs during and immediately following major storm events, and enable safe re-occupation following an evacuation or weather event.

B. New construction of multi-family residential dwelling units in the CHHA shall achieve LEED Gold certification or higher, or shall comply with the following CHHA Design Standards. The point system provides options within two components and each development shall achieve a minimum number of points from the menu of options shown in the following table, based on the number of dwelling units within the development as shown below.

(1) 3 to 5 units: X points total, no less than X point per component.
(2) 6 to 29 units: X points total, no less than X points per component.

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(3) 30 to 89 units: X points total, no less than X points per component.
(4) 90 to 199 units: X points total, no less than X points per component.
(5) 200 or more units: X points total, no less than X points per component.

TABLE XX: POINT SYSTEM FOR MULTI-FAMILY RESIDENTIAL DEVELOPMENT	
Development Activity	**Points Earned**
Component 1: Risk Reduction	
Construct building to meet design requirements of next higher classification of Risk Category, per ASCE 7.	X
Construct building to meet Miami-Dade High Velocity Hurricane Zone (HVHZ) standards.	
Elevate finished floor above minimum 2 feet required (per ASCE 24 & Floodplain regulations)	X per each additional foot of elevation up to 6 feet
Elevate mechanical systems above minimum 2 feet required (per ASCE 24 & Floodplain regulations)	X per each additional foot of elevation up to 6 feet
Construct an impact-resistant or fully adhered roof with parapets located every 3-feet	X
Protect coastal property with a living shoreline (LSL) per the US Army Corps of Engineers (USACE) Living Shoreline Permit Standard. *(LSLs use natural materials to stabilize the shoreline and maintain valuable fish and wildlife habitat; LSLs utilize a variety of materials such as wetland plants, oyster shell, coir fiber logs, sand, wood, and native rock.)*	X
Design building located in the Coastal A Flood Zone to Flood Zone V	X
Component 2: Recovery	
Generate a percentage of the electricity expected to be used by the development from on-site solar and/or wind energy sources	X for at least 25% X for 26-49% X for 50-74% X for 75-100%
On-site battery storage of solar generated power to keep critical functions working in the event of power failure	X for Life Safety Features; X for 100% of Normal Load of Common Areas; X for Lighting & Refrigeration of Units; X HVAC in Units; X for 80-100% Normal Load of all buildings
Install a cool/high-reflectance roof (coating that is white or has special reflective pigments that reflect sunlight) on at least 75% of the total roof area of the development, with a minimum SRI (solar reflectance index value) of 39 and in accordance with the standards set by the HVWZ	X
Install a geothermal energy heating & cooling system that serves as least 75% of the project's residential units	X
Pre-wire all units to accept power provided by on-site solar panels and/or wind turbines	X
Install a 20+ SEER HVAC system in each dwelling unit	X
Install a 16-19 SEER HVAC system in each dwelling unit	X
Install efficient, zone-controlled heating and cooling systems in each residential unit (mini-splits, or smart thermostats, etc.)	X
Install a solar or tank-less water heating system in each residential unit	X
Install no fewer than 2 operable windows on no fewer than two exterior walls in each unit	X
Install a generator for power generation to keep critical functions working in the event of power failure	X for Life Safety Features; X for 100% of Normal Load of Common

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	Areas; X for Lighting & Refrigeration of Units; X HVAC in Units; X for 80-100% Normal Load of all buildings
Install highly-reflective blinds/shades, low-E window film/tint, external/structural shade to reduce solar gain	X
Provide for a Resilient Common Area with back-up power source to provide air-conditioning and power, food, water and emergency supplies to support residents after a storm event	X
Provide for a Neighborhood Resilience Hub to provide on-site and neighborhood residents point of distribution of services before and after storm events	X
Contribute to the Emergency Shelter Fund	X points per $1,000 up to X max.

DRAFT

Updated July 10, 2019

ATTACHMENT C: ULI TECHNICAL ASSISTANCE PANEL REPORT

ULI TECHNICAL ASSISTANCE PANEL
CITY OF ST. PETERSBURG

ZONING STANDARDS FOR MULTI-FAMILY DEVELOPMENT IN THE COASTAL HIGH HAZARD AREA

June 18 + June 19, 2019

INTRODUCTION

About ULI

The Urban Land Institute (ULI) is a not-for-profit education and research institute supported by its members. Its mission is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. Established in 1936, ULI has more than 45,000 members internationally representing all aspects of land use and development disciplines. The Tampa Bay District Council has more than 600 members in 7 counties including Pinellas, Hillsborough, Pasco, Manatee, Sarasota, Hernandez and Citrus.

About ULI Technical Assistance Panels (TAPs)

In keeping with the Urban Land Institute mission, Technical Assistance Panels (TAPs) are convened to provide planning and development assistance to public officials and local stakeholders of communities, nonprofit organizations and private sector representatives who have requested assistance in addressing their land use challenges. A group of diverse professionals representing the full spectrum of land use and real estate disciplines typically spend two days visiting and analyzing the built environments, identifying specific planning and development issues, and formulating realistic and actionable recommendations to move initiatives forward. Panel members are not compensated for their time, but they are reimbursed for out-of-pocket expenses, such as overnight lodging and transportation to attend the TAP.

ULI TEAM

ULI Tampa Bay assembled a diverse mix of regional and national ULI member leaders:

- Jim Cloar, Downtown Development Strategies (TAP Chair)
- Chris Ahern, Applied Technology & Management
- Michael Antinelli, Brizaga, Inc
- Leigh Fletcher, Fletcher & Fischer
- Nick Herring, Framework Group
- Manuela Powidayko, City of New York
- Whit Remer, Insurance Institute for Business & Home Safety
- Kristine Retetagos, KAST Construction
- Taryn Sabia, Florida Center for Community Design and Research, USF
- Jeremy Sharp, City of Norfolk
- Siobhan O'Kane, ULI Tampa Bay
- Jenna Wylie, ULI Tampa Bay
- Maggie Winter, Florida Center for Community Design and Research, USF

PARTNER

- City of St. Petersburg

SPONSOR

- Kresge Foundation
- Urban Land Institute (ULI) Urban Resilience Program

BACKGROUND

ULI Tampa Bay provided technical assistance to the City of St. Petersburg on zoning standards for the City of St. Petersburg's Comprehensive Plan and Land Development Regulations in the Coastal High Hazard Area (CHHA).

The 2016 CHHA area within the city has more than doubled in size due to an update to the computer model that determines vulnerable area. Developed by the National Weather Service, the SLOSH model estimates storm surge heights resulting from historical, hypothetical, or predicted hurricanes by taking into account the atmospheric pressure, size, forward speed, and track data. These parameters are used to create a model of the wind field which drives the storm surge. The CHHA now covers a total of 16,328 acres or 41% of the City of St. Petersburg, an increase from 7,705 acres identified in the 2010 map. See page 45.

Locations now within the CHHA include some high-profile areas identified as important for economic development, including the Innovation District, the USF St. Petersburg Campus, Metropointe Commerce Park, Carillon Office Park, Jabil Headquarters Campus, and the Skyway Marina District.

Areas included in the CHHA are governed both by state law and the policies adopted to administer those provisions in local government comprehensive plans. To reduce loss of life and property caused by natural disasters, the State of Florida requires local governments to identify the CHHA and plan accordingly with the emphasis on reducing vulnerability to hurricane impacts.

The city wants to increase resiliency and reduce flood risk within the CHHA by establishing elevated design standards in the land development code for multifamily residential development in the CHHA in order to create projects that are more resilient to storm surge, mitigate for service and infrastructure needs during and immediately following a major storm event, enable safe re-occupation as quickly as possible following an evacuation, and increase the likelihood that there is something to come back to.

The city is considering elevating design standards for multi-family development through the introduction of a point system within the City's Land Development Code (LDR) that would enable developers the opportunity to choose from a menu of 'resilience measures' that promote flood risk reduction, stormwater management, and energy resilience, among other practices.

This point system would apply to any new multi-family development in the CHHA. The city is interested in the City of Norfolk, Virginia's recent adoption of a similar code.

Given that the CHHA is now 41% of the city, the city is being thoughtful about balancing goals and objectives for addressing resiliency, emergency management, economic development, workforce housing, community and growth management. As such, the city is also reviewing code and comprehensive plan amendments pertaining to requests for an increase in density in the CHAA. Under current policy, requests for increased density are <u>not allowed</u> in the CHHA, per Land Use Policy LU7.1. In other words, any requests to amend current zoning to allow for a greater number of units is currently not permitted.

Under the City's current proposed LDR and Comprehensive Plan amendments, meeting the thresholds of the proposed 'resilient point system' would allow a developer to apply for additional density. In addition to satisfying the points requirement, these applications would also have to be evaluated against balancing criteria that would be added to the City's Comprehensive Plan.

These balancing criteria, outlined below in brief, are already found in the Countywide Plan Rules, administered by Forward Pinellas, but would be adopted at the local level. The City of St. Petersburg proposes to add an additional three, shown in items 10 through 12.

1. *Access to Emergency Shelter Space and Evacuation Routes.*
2. *Utilization of Existing and Planned infrastructure.*
3. *Utilization of Existing Disturbed Areas.*
4. *Maintenance of Scenic Qualities and Improvement of Public Access to Water.*
5. *Water Dependent Use.*
6. *Part of Community Redevelopment Plan.*
7. *Overall Reduction of Density or Intensity.*
8. *Clustering of Uses.*
9. *Integral Part of Comprehensive Planning Process.*
10. ***Location within an Activity Center or Target Employment Center.***
11. ***Furthers the Goals and Policies of the Integrated Sustainability Action Plan (ISAP).***
12. ***Reduction of Storm Vulnerable Structures.***

Furthermore, for project proposals that would increase density in the CHHA, the city proposes to require multifamily developers to fiscally mitigate the increased demand for emergency shelter capacity that the project would trigger by increasing the population density of the CHHA. Developers would be required to pay a "to be determined" Shelter Mitigation Fee proportional to the county's cost burden for providing additional shelter space.

It should be noted that any requests for increases in density via an amendment to the City's Future Land Use Map and/or Official Zoning Map, whether they are City-initiated or private applications, would still be subject to the City's normal application process, including public notice, CPPC and City Council public hearings, and state, regional and county review. All applications are reviewed and considered on a case-by-case basis.

TAP SCOPE

1. **Evaluate the draft zoning standard and comprehensive plan amendment and:**

    a. Identify additional "requirements" that multifamily residential projects must include when constructing within the CHHA, regardless of an increase in density. *(For example, the City of Norfolk components/categories are Risk Reduction, Stormwater Management, Energy Resilience. Create some categories that are more St. Petersburg-centric.)*
    b. Estimate the costs of the additional requirements.
    c. Assign a "weight" to each requirement and devise a "minimum number of points needed" scorecard (for each component/category).

2. **Provide other recommendations pertaining to the draft CHHA standard and introducing increased density in the CHHA.**

TAP PROCESS

ULI Tampa Bay assembled a team of ULI members who have expertise in resilient construction standards, multi-family development, pre-construction & estimating, planning, engineering, economic development, and land-use law for an intensive two-day workshop. Prior to convening, the ULI team received background information specific to the CHHA and relevant economic development and planning documents. ULI had preliminary meetings with the city team to prepare for the panel and better define the scope of work for the two-day TAP.

Day one of the TAP included a tour of the key locations within the recently expanded CHHA as well as a series of stakeholder interviews. Stakeholders included city staff, business and community leaders, developers, insurance experts and more.

Day two focused on potential strategies and solutions to the issues. Panelists formalized their observations and developed recommendations. At the day's end, the ULI team made an initial public presentation to the team at the city and members of the business and residential community.

Perceptions & Potential

Every ULI Technical Assistance Panel begins with and relies on outreach to get a substantive insider perspective on the subject at hand.

A series of stakeholder meetings were held in order for the ULI team to assess concerns, questions, and ideas regarding proposed changes to the City's land development code and comprehensive plan. Stakeholder groups included members of the development community: practitioners from planning, engineering and architecture, developers, utility companies, insurance, and the Tampa Bay Regional Resiliency Coalition. ULI held additional meetings with city staff, including from emergency management. The following opportunities and constraints emerged from the stakeholder discussions.

What We Heard

Opportunities

- Buildings constructed to a higher standard within the CHHA makes the CHHA more resilient and sets an important example for the wider City.
- Attention to this topic represents an opportunity to focus on preparedness education and outreach.
    - When requiring developers to create "Hurricane Evacuation and Re-Entry Plans" (per Development Regulation G in the draft proposal) be mindful that this is outside of their wheelhouse. The city should work with emergency management to provide examples of best practice and a simple template to provide clarity, make the process easier on developers, and ensure that the plan is appropriate, effective and aligned with the emergency management procedures and goals.
- Opportunity to increase the likelihood that residents have something to return to in the case of a storm.
- Establishing a fund to make capital improvements or providing financial resources to emergency management is a smart solution to achieve the envisioned emergency response plans for the City.
- From an emergency management perspective, there may be value in increasing the number of resilient dwellings that would be under mandatory evacuation. New developments that are designed to both be livable after a hurricane event and be self-sustaining after residents are allowed to return to their homes may reduce the overall dependence on emergency management services.
- New development in the CHHA can mitigate risk by replacing older, more vulnerable structures with a much more resilient building stock. The high standards of current Florida building code ensure that any new building would be inherently more resilient than those built before 2010.
- In general, many of the large institutions in the CHHA, like the hospitals, have a strong need for more workforce housing close to their campuses.
- During emergency situations and storm events, critical facilities such as hospitals provide their own shelter for workers and their families in order to have critical staff

teams nearby and ready to respond. This is made easier if the staff already live nearby, because the ability to make a longer commute to the hospital during a storm event can become very difficult.

- There is the potential to apply this new code to commercial buildings and other uses in the CHHA for a more complete picture of a resilient St. Petersburg.
- Future opportunity to apply this standard city-wide with potential higher standard for the CHHA.
- There is an opportunity to encourage and incentivize the upgrade of existing buildings/redevelopment to be more resilient.
- Living shorelines can be community assets. Refer to Army Corps Nationwide Permit 54 for erosion-prevention projects.
- Consideration for other potential development off-sets, other than increased density. For example, a TDR/density swap within the CHHA with a preservation component that would lead to no net change in the overall density of the CHHA.
- Potential for encouraging new linkages or communal investment in shared systems which relate to multi-family development and future infrastructure.
- The proposed code can unlock opportunities for economic development in the burgeoning Innovation District, etc. because it will provide a pathway to thoughtfully increase density, which is currently not allowed under existing code.
- The ROI for mitigation is strong. A recent analysis of 23 years of federally funded natural hazard mitigation investment suggests that society will ultimately save $6 for every $1 spent on up-front mitigation cost.

Constraints

- There is the possibility of disinvestment in the CHHA because of an increase of cost of development.
- Less development in the high-profile areas of the CHHA could slow city economic development efforts. It could also depress real estate driven tax revenue, a critical funding source for the City's future resilient infrastructure investments.
- The proposed new balancing criteria is limiting and doesn't allow for consideration of applications outside targeted areas.
- The proposed draft code doesn't provide for a great enough range of options or flexibility and can therefore be limiting or render development infeasible.
- There is discontent on behalf of some developers of current projects within the new CHHA boundaries that have already been entitled and planned, but not yet issued permits. They feel they didn't have a chance to accommodate for the proposed point system during due diligence, and that it could unfairly affect the feasibility of projects that are already well into the planning process.
- Mitigation and adaptation techniques and threat measurement technologies are ever evolving. There is concern that the new code and point system may be too rigid to appropriately respond to and give recognition for ongoing innovations in technology and resilience problem solving.
- The proposed point system is building-specific but doesn't necessarily apply easily to a master planned, mixed-use or community scale proposals. Many of these large-

scale developments have resilient systems built in at the community level, not necessarily within individual buildings. At present, the proposed point system doesn't have a way to recognize and allocate points for these types of investments of merit.

- There seems to be a lack of a detailed understanding of the vulnerable populations within the CHHA, which would help to inform a more holistic strategy for this area.
- There is a lack of understanding of how this draft code relates to other city initiatives (Complete Streets, ISAP, Vision 2050).
- Concern that increased density will place more people in harm's way and that there will be an impact of adding additional density on existing shelter deficits.
- A missed opportunity to instead focus/encourage development in less vulnerable areas and utilize coastal land for preservation/mitigation.
- Concern that this elevated standard will exacerbate housing affordability issues.
- Suggestion that the city should provide more "carrots" than sticks to incent resilient building practices. For example, the city could consider a reduction in impact fees as a reward for following the points system.
- Concern that designing the points thresholds based on ranges of the number of dwelling units in a project (per section B *16.30.040.4. -- CHHA Design Standards* in the draft proposal) could lead to unintended consequences. Some stakeholders suggested devising a points threshold calculated on a "per unit basis".

Panel Recommendations

The City of St. Petersburg is working to reconcile risk reduction with future development. Integral to the city's policy decision making is the consideration of and reference to the city's goals, such as community development and safety, the Integrated Sustainability Action Plan (ISAP), workforce housing goals and its 'Health in all Policies' strategy. It is important that city leaders consider how this regulation can be applicable to a balanced, community-wide investment strategy. The city asked the ULI team to weigh in on a specific component of this.

The ULI team evaluated the draft zoning code for an elevated standard for multi-family development in the CHHA, prepared by staff at the City of St. Petersburg. This would introduce a resilience point system for all new multi-family development in the CHHA.

The City of Norfolk has served as a model for the City of St. Petersburg as it explores this resilience point system. The ULI team's recommendations were in part informed by the City of Norfolk's experiences and lessons-learned. These may also be instructive for the City of St. Petersburg as it moves forward.

- Include a range of options and alternatives for development, aligned with resilience goals.
- Be open and adaptive to change as the zoning code is implemented. Continually evaluate and amend, as required.
- Clearly connect the zoning code to a comprehensive strategy and goals for city-wide resiliency.
- Begin and maintain a dialogue with the local development community. Their feedback will be vital in fine-tuning the requirements.
- Track how the code is being implemented on a site-by-site basis. The innovative implementations that developers come up with can provide valuable case studies for future users.
- Be prepared to go "off book". Each site is unique, and the code can't possibly consider every possibility. In these unique circumstances, be prepared to adjust requirements.

More information on the City of Norfolk and the City of New York's experiences can be found beginning on page 36.

Expanded Point System Components

The city's proposed point system would require new development of multi-family structures to incorporate resilience measures from two components/categories– 'Risk Reduction' and 'Recovery'. The intent is to ensure that developments are more resilient to storm surge and enable safe re-occupation following an evacuation or weather event.

The ULI team determined that a system with additional components would better suit the multi-faceted approaches of addressing resiliency and represent a more holistic approach to building resilience and recovering quickly after storm events. These are:

- **Structural Mitigation:** Measures address physical construction, engineering techniques or technology that work to achieve hazard resistance and resilience in structures or systems to reduce or avoid possible impacts of hazards.
- **Energy:** Measures address the ability for buildings to be resource efficient, reduce waste and sustain electricity independently from the grid. They also facilitate the ability for buildings to stay online during weather events. Measures in this category align well with the city's climate and energy goals and further the objectives of the recently adopted Integrated Sustainability Action Plan.
- **Nature-Based Mitigation:** Nature-based measures use natural systems to provide critical services, such as wetlands for flood mitigation or mangroves to reduce the impact of waves, storm surge, and coastal erosion. These can be a cost-effective and flexible approach for disaster risk and water resource management.
- **Recovery:** This component focuses on measures implemented for post-disaster recovery, ensuring that places within the CHHA are intact and habitable after required evacuation events and that buildings are occupiable after residents are allowed to return. This component facilitates the resumption of services within a city.

Additional Pathways to Development

The proposed code amendment currently provides one pathway to development of new multi-family dwelling units in the CHHA. Through the proposed 'point system', developments must achieve a certain threshold of points, determined through the integration of measures outlined in the table.

The ULI team recommends providing additional pathways to development. Importantly, these pathways would still result in resilient building in the CHHA, but would allow more choice and flexibility, as well as help to address other city goals. This recommendation is, in part, informed by the experience of the City of Norfolk, which introduced the point system or 'Resilient Quotient' into their code in early 2018. See more on Page 36.

There are certain standards that would be a prerequisite to all development, unless identified as infeasible. These include:

- **Elevation Requirements:** All new or substantially improved multi-family units would need to comply with current city elevation requirements that the lowest habitable floor and all mechanical, electrical and plumbing (MEP) systems shall be at a minimum of base flood elevation (BFE) + 2 feet of freeboard. The ULI team recommends incorporating this requirement into this code to reinforce this standard.

- **Measures to Address Recovery:** Regardless of the chosen pathway to development, new development would need to incorporate measures that address recovery, as detailed

in the recovery points component. Measures in this category specifically address impacts of weather events on residents and buildings.

The ULI team's recommended pathways for the development of new multi-family dwelling units in the CHHA include:

1. **Point System**

   This development pathway enables new developments to utilize the point system, which provides a menu of options for building resilience. A minimum number of points would be required based on the number of dwelling units. Applications for development would need to include points from all four components – structural mitigation, energy, nature-based solutions mitigation and recovery.

2. **Leadership in Energy and Environmental Design (LEED) GOLD standard (or higher) or similar certification, plus a minimal number of points from the Recovery component.**

   Under this pathway, development of new multi-family standards that achieves a LEED Gold certification or higher would be permitted. LEED, which is a globally recognized symbol of sustainability achievement, provides a framework to create healthy, highly efficient and cost-saving green buildings.

   Other similar certifications could also be considered, at the discretion of the zoning administrator.

   A proposed development that meets LEED Gold standard or higher would also need to include a certain number of points under the recovery category on the point system to ensure buildings specifically mitigate for coastal storm events.

3. **Workforce housing, plus a minimal number of points from the Recovery component.**

   During stakeholder interviews, the ULI team heard about the need for more affordable housing options throughout the city. With its doubling of size, the CHHA now includes more locations within employment and activity centers that could benefit from more affordable residential options.

   Under this pathway, a proposal for the development of workforce housing that meets elevation requirements could be considered within the CHHA. Any new development

would still need to include a certain number of points under the recovery category on the point system to ensure buildings specifically mitigate for coastal storm events.

Workforce housing, or sometimes referred to as “missing middle housing” is defined by the City’s Comprehensive Plan.

Buildings that meet the City’s elevation requirements, comply with the required building code and introduce more ‘recovery’ components would be more resilient. This alternative pathway seeks to balance the financial feasibility of constructing affordable units, which can be more difficult than units considered market rate or luxury, with ensuring more resilient building.

4. **Historic Preservation, plus a minimal number of points from the Recovery component.**

   This pathway would provide an exemption for designated historic structures. This would apply for any multi-family, deemed historic based on local, state and/or historic designation that is subject to substantial renovation. This is due to the cost that can often be associated with retrofitting an existing building, including complying with an elevation requirement. Any proposal for exemption on these grounds would need to also achieve a certain number of points under the recovery category.

Determining Points for the Point System

The ULI team conducted an exercise to evaluate costs and benefits of resiliency standards on a scale of low, middle, and high. The ULI team ranked each development activity by “cost of construction” and “value to resilience”. Both factors are important to consider and should inform the specific points allotted for each development activity/criterion. The rating system created by the ULI team has laid the foundation for creating the points system.

Items to consider when scoring points:

- The value of the resilience measure should reinforce the city’s goals and objectives for resiliency, as identified in the ISAP. To the extent possible, it should also be scored according to the specific vulnerabilities in the CHHA, such as flooding.
- Including a range of options from low to the high cost is preferable to provide flexibility and scalability to the development without compromising on its resiliency. The ULI team has additional suggested measures, identified in Table 2 on Page 26.
- The ULI team recommends that if a development uses the ‘point system’ that it should be required to earn at least one point from each of the four components, but earned points do not need to be distributed equally amongst the 4 components to reach the overall points threshold.

- As the point system is implemented, it is important to continually evaluate and amend. This is a new and unique system in the code and will require some ‘real time’ testing to make work.

These rankings shown in Table 3 on Page 29.

Recommended edits to the body copy of the *DRAFT CHHA LDR Code Amendment* by the ULI Team are illustrated in red below.

City of St. Petersburg
DRAFT CHHA LDR Code Amendment

SECTION 16.30.040. - DEVELOPMENT IN THE COASTAL HIGH HAZARD AREA (CHHA) ~~AND THE HURRICANE VULNERABILITY ZONE OVERLAY[9]~~

16.30.040.1. - Development regulations.

A. The Coastal High Hazard Area (CHHA) is the area at or below the elevation of the Category 1 storm surge line as established by the sea, lake and overland surges from hurricanes (SLOSH) computerized storm surge model. The CHHA ~~and the hurricane vulnerability zone are~~ is generally shown on the map in the coastal management element of the Comprehensive Plan. Development within these areas shall be consistent with the goals, objectives and policies of the Comprehensive Plan.

B. New construction of hospitals, nursing homes and assisted living facilities is prohibited in ~~Hurricane Evacuation Level A Zones~~ the CHHA. ~~The construction or expansion of these uses in Hurricane Evacuation Level B Zones is discouraged.~~

C. New mobile home parks are prohibited in ~~Evacuation Level A Zone~~ the CHHA.

D. Solid waste and commercial hazardous waste management facilities including regional storage, treatment or transfer sites are prohibited in the ~~hurricane vulnerability zone~~ CHHA.

E. New construction of residential multifamily dwelling units resulting from a density/intensity increase from a plan amendment after *adoption date* shall provide for hurricane shelter mitigation. Such mitigation for the impacts attributable to the development shall include one or a combination of the following: payment of a hurricane mitigation shelter fee, contribution of land, or construction of hurricane shelters. A hurricane shelter mitigation fee shall be provided prior to issuance of the certificate of occupancy for the dwelling unit(s), and calculated in accordance with the following formula: TBD. If the property owner elects to contribute land or construct hurricane shelter space, a binding agreement shall be executed regarding such mitigation prior to issuance of a building permit for construction of the residential units.

F. Construction, expansion or substantial renovations of hotel uses shall provide a Hurricane Evacuation and Closure Plan that complies with all Pinellas County and City of St. Petersburg hurricane evacuation plans and procedures to ensure orderly evacuation of guests and visitors pursuant to the Pinellas County Code, Chapter 34, Article III.

G. New construction of multi-family residential dwelling units shall provide a Hurricane Evacuation and Re-entry Plan requiring mandatory evacuation in accordance with Emergency Management Directives. Such requirements shall be incorporated into a legally binding document such as lease documents, condominium rules, homeowner rules, or other such method approved by the POD.

16.30.040.2. – CHHA Design Standards.

A. Purpose: The City of St. Petersburg is committed to improving the capacity to endure and quickly recover from coastal hazards. This section is intended to ensure that developments are more resilient to storm surge, mitigate for service and infrastructure needs during and immediately following major storm events, and enable safe re-occupation following an evacuation or weather event.

B. All new or substantially improved multi-family structures shall comply with one of the following:

1. The lowest habitable floor and all MEP systems shall be at a minimum of base flood elevation (BFE) + 2 feet of freeboard and shall utilize Table X to identify additional required activities. The point system provides options within four ~~two~~ components and each development shall achieve a minimum number of points, with at least X points from each component selected from the menu of options shown in the following table, based on the number of dwelling units within the development as shown below.

    - 3 to 5 units: X points total, no less than X point per component.
    - 6 to 29 units: X points total, no less than X points per component.
    - 30 to 89 units: X points total, no less than X points per component.
    - 90 to 199 units: X points total, no less than X points per component.
    - 200 or more units: X points total, no less than X points per component.

    Or

2. The lowest habitable floor and all MEP systems shall be at a minimum of base flood elevation (BFE) + 2 feet of freeboard and the structure shall achieve LEED Gold certification or higher and shall achieves a minimum of X points from the Recovery component.

    Or

3. The lowest habitable floor and all MEP systems shall be at a minimum of base flood elevation (BFE) + 2 feet of freeboard and the structure contains a minimum of 20% *(the ULI team has suggested a minimum of 20%, but defers to the City's workforce housing goals to better inform the appropriate percentage of units)* of dwelling units dedicated to workforce housing and achieves a minimum of X points from the Recovery component.

    Or

4. For structures designated as historically significant, as defined by XXX, the construction, expansion, or substantial renovation shall achieve a minimum of X points from the Recovery component and develop an evacuation plan in accordance with local mitigation strategies.

Table 1 below details the ULI Technical Assistance Panel's response to the *Draft Point System For Multi-Family Residential Development* provided by the City of St. Petersburg.

The panel spent a significant portion of the 2 days examining each of the development criteria provided in the original draft of the points system provided by the city. Each criterion for points was evaluated for practicality, resilience value & intent, clarity and unintended consequences.

The table below goes line by line through the original draft point system and provides the ULI TAP Team's recommended changes and clarifying comments on why changes were made.

- For easy reference, each of the original development activities/criteria has been given a number
- "Development Activities" (actions that earn points) are referred to as "criterion/criteria" in the commentary below.

[ORIGINAL DRAFT]

TABLE 1: POINT SYSTEM FOR MULTI-FAMILY RESIDENTIAL DEVELOPMENT

COMPONENT 1: RISK REDUCTION

		DEVELOPMENT ACTIVITIES / CRITERIA FOR POINTS
#1	**ORIGINAL DRAFT:**	Construct building to meet design requirements of next higher classification of Risk Category, per ASCE 7.
	RECOMMENDED CHANGE:	Construct building to meet design requirements of next higher classification of Risk Category, per ASCE 7 OR Increase design wind speed from ASCE-7 recommendations and apply Miami-Dade High Velocity Hurricane Zone (HVHZ) standards for current classification of Risk Category OR Increase design wind speed from ASCE-7 recommendations and apply Miami-Dade High Velocity Hurricane Zone (HVHZ) standards of the next higher classification of Risk Category, per ASCE 7

	COMMENTS:	*Considering the damage inflicted by Hurricane Michael and the increasing frequency of major hurricanes, the City of St. Petersburg may wish to consider strengthening its building code as it relates to wind resistance. ASCE-7 includes minimum wind speeds required for the design of buildings and other structures for various risk categories, and it is reasonable to offer additional points for applying wind criteria for the next risk category. Additionally, the city may wish to consider the implementation of High Velocity Hurricane Zone criteria. Utilized in Miami-Dade and Broward Counties, HVHZ criteria calls for specific resilient building materials and other products that meet the rigorous testing requirements of the HVHZ, going above and beyond the requirements of the Florida product approval.* ***Please note that the scale of options above should award progressively more points.* ****If HVHZ is already required in the City, we recommend not awarding points.*
#2	**ORIGINAL DRAFT:**	**Elevate finished floor above minimum 2 feet required (per ASCE 24 & Floodplain regulations)**
	RECOMMENDED CHANGE:	Elevate the first habitable/residential floor beyond the required Base Flood Elevation (BFE) + 2 feet of Freeboard: • XX points for each additional foot of elevation above 2ft+ BFE
	COMMENTS:	*The ULI team recommends the city maintain the existing requirement for minimum elevation of first habitable/residential floor, at minimum, and reiterate this requirement in the body copy of the CHHA LDR Code Amendment under the 16.30.040.2. – CHHA Design Standards section. As noted in the recommendation, the city should consider implementing a calculated minimum elevation by applying "conservative" SLR projections adopted by the Regional Planning Council in 2019 to current BFE. Developments would then be the greater of existing strategy of BFE +2 feet or BFE projected in minimum of 20 years design life. Please note that ULI has named the conservative projections but the city may want to review for design impact from projected design life before implementing in code.* *Points should be considered for <u>each</u> additional foot of elevation of the habitable floor beyond the 2+BFE already required. This builds in flexibility and scalability. For example, a town home can earn some points for accommodating 3ft+BFE, and a larger multifamily project that invests in elevating residential units and stacking them above a ground floor garage would (and should) be rewarded many more points. The garage example is a much higher investment for the developer, provides a much higher resilience value, and removes the risk of residential flooding.*

#3	**ORIGINAL DRAFT:**	**Elevate mechanical systems above minimum 2 feet required (per ASCE 24 & Floodplain regulations)**
	RECOMMENDED CHANGE:	Elevate the mechanical system beyond the required Base Flood Elevation (BFE) + 2 feet: • XX points for each additional foot of elevation above 2ft+ BFE, up to XX feet OR • XX points for installing mechanical, electrical and plumbing (MEP) equipment or back-up systems such as generators on the roof OR an ancillary structure that elevated to the most conservative (highest) flood elevation produced by the recent SLOSH model.
	COMMENTS:	*Similar to the comments for development activity #2, the ULI team recommends the city maintain the existing requirement for minimum elevation of mechanical systems and reiterate this requirement in the body copy of the CHHA LDR Code Amendment under the 16.30.040.2. – CHHA Design Standards section.* *Scalable points should be considered for each additional foot of elevation beyond the 2+BFE already required up to XX additional feet. The highest amount of points should be given to projects that relocate MEP to the roof OR an ancillary structure that elevated to the most conservative flood elevation produced by the recent SLOSH model, because this ensures they are free from any risk of flooding.*
#4	**ORIGINAL DRAFT:**	**Construct an impact-resistant roof (Are some materials better than others, metal?)**
	RECOMMENDED CHANGE:	Construct an impact-resistant roof OR fully-adhered roof with parapets located every 3 feet
	COMMENTS:	*Fully adhered roof attachments can also provide better wind uplift ratings with fewer seams; more symmetrical wind loadings; eliminates roof fasteners that penetrate the roof membrane;*
#5	**ORIGINAL DRAFT:**	**Install impact resistant glazing (or operable hurricane shutters, one or other is required, but is one preferable and should be incentivized?)**

	RECOMMENDED CHANGE:	~~*Install impact resistant glazing (or operable hurricane shutters, one or other is required, but is one preferable and should be incentivized?)*~~ [DELETE]
	COMMENTS:	*Removed for redundancy. This is already well-covered by code and shouldn't merit points when compared to other criteria in this table. That being said, hurricane shutters are less preferential than impact glazing.*
#6	**ORIGINAL DRAFT:**	**Protect coastal property with a living shoreline (LSL).** (LSLs use natural materials to stabilize the shoreline and maintain valuable fish and wildlife habitat; LSLs utilize a variety of materials such as wetland plants, oyster shell, coir fiber logs, sand, wood, and native rock.)
	RECOMMENDED CHANGE:	Protect coastal property with a living shoreline (LSL) <u>per the US Army Corps of Engineers (USACE) Living Shoreline Permit Standard.</u> *(LSLs use natural materials to stabilize the shoreline and maintain valuable fish and wildlife habitat; LSLs utilize a variety of materials such as wetland plants, oyster shell, coir fiber logs, sand, wood, and native rock.)*
	COMMENTS:	*Added in a reference to the US Army Corps of Engineers (USACE) Living Shoreline Permit Standard. This will provide a consistent standard for what qualifies as a "LSL" and ensure the investment is worthy of points and meets the level of mitigation desired.*
#7	**ORIGINAL DRAFT:**	**Design building located in the Coastal A Flood Zone to Flood Zone V standards**
	RECOMMENDED CHANGE:	Design building located in the Coastal A Flood Zone to Flood Zone V standards <u>or the most conservative (highest) flood elevation produced by the recent SLOSH model.</u> = XX Points
	COMMENTS:	*The city asked if this criterion was the same as that stated in criterion #1. They have some similarities but are not the same. The Flood Zone V standards are more focused on flooding, with*

		a particular focus on protecting coastal areas that would likely be subjected to High Velocity Wave Action (HVWA) during a storm. *Flood Zone V standards may require resilient upgrades that may not make sense for areas that have no chance of High Velocity Wave Action (HVWA).* *The city might consider offering more points for sites right at the waterfront if they pursue this more stringent rule, since they may be subject to waves. With sea level rise, wave patterns will tend to shift more towards inland. Buildings in V or Coastal A Zones should either build open foundations so the water can flow below the structure (can be used for parking), with a small enclosure (up to 300sqf) for access. You can enclose it, but only with breakaway walls that are designed to purposely fail in the event of a flood.*
Component 2: Recovery		
#8	**ORIGINAL DRAFT:**	**Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation.**
	RECOMMENDED CHANGE:	~~Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation.~~ [DELETE]
	COMMENTS:	*Redundant -- This should be an inherent component of the 'Hurricane Evacuation and Re-entry Plan' required of all new construction of multi-family dwelling units as stated in **16.30.040.1. - Development Regulation G** in the draft CHHA LDR Code Amendment. It also may be redundant with many of the development activities below (see #9 thru #16). Projects with generators and back-up power sources, etc. should already have procedures in place for using them.* *For clarification purposes, it may be worth adding this criterion under **16.30.040.1. - Development Regulation G** in the draft CHHA LDR Code Amendment. Because of the crossover with other criteria in this table, the ULI team does not believe this should merit points.*
#9	**ORIGINAL DRAFT:**	**Generate no less than 75% of the electricity expected to be used by the development from on-site solar and/or wind energy sources**
	RECOMMENDED CHANGE:	<u>Renewable Energy Sources:</u> Generate a percentage (see options below) of the electricity expected to be used by the development from on-site solar and/or wind energy sources:

		a) 75–100% = XX points b) 50-74% = XX points c) 26-49% = XX points d) At least 25% = XX points
	COMMENTS:	*For clarity, combine criteria #9, #10, #13 & #14 Under one "Renewable" heading. Create a sliding points scale based on percentage of electricity generated by on-site renewable systems. These criteria are important for getting people back online quickly after a storm and align well with the goals of the ISAP and Bloomberg's Climate Challenge Grant. Adding flexibility and a percentage scale will encourage more developers to consider investing in renewables.*
#10	**ORIGINAL DRAFT:**	**Generate no less than 50% of the electricity expected to be used by the development from on-site solar and/or wind energy sources**
	RECOMMENDED CHANGE:	~~Generate no less than 50% of the electricity expected to be used by the development from on-site solar and/or wind energy sources~~ [DELETE]
	COMMENTS:	*See comments for #9.*
#11	**ORIGINAL DRAFT:**	**On-site battery storage of solar generated power with X amount of capacity**
	RECOMMENDED CHANGE:	On-site battery storage of solar generated power to keep critical functions working in the event of power failure:

(A)	Life Safety Features*	XX Points
(B)	(A) + At least 100% of Normal Load of Common Areas	XX Points
(C)	(A) + (B) + Lighting & Refrigeration Residential Units	XX Points
(D)	(A) + (B) + (C) + HVAC in Residential Units	XX Points
(D)	80-100% of Normal Load of Entire Building	XX Points

*Types of circuits that promote "Life Safety" to be powered by onsite battery storage which are in addition to current requirements of Emergency exit lighting requirements (i.e., NFPA):

- Emergency exit lighting that recharges batteries of emergency exit lighting.

		• Overhead lighting, for every other fixture in common areas. (greater than NFPA emergency generator minimum requirements)
	COMMENTS:	*When considering energy savings alone, battery technology isn't efficient and cost effective enough just yet to incent most multifamily projects to invest in solar and storage. Systems typically have a poor economic return without accounting for savings due to avoided outage costs. Incorporating avoided outage costs triples the annual savings delivered by the solar+storage systems for multifamily.* *While the cost-effectiveness of solar storage to support energy resilience remains out of reach for many property owners, it is clear that solar plus storage will become cheaper, more robust, and more powerful over the coming years, in both centralized and distributed applications.* *Even if semi-aspirational, the ULI team encourages the city to keep this criterion in place and consider it to be on the top end of the points allocation due to cost and resilience value being high.* *NOTE: This criteria compliments #9 criteria about renewables well and is deserving of additional points beyond those allocated to #9. Recommendations*
#12	**ORIGINAL DRAFT:**	**Install a cool roof on at least 25% [sliding scale?] of the total roof area of the development** **[Add to definition section]**
	RECOMMENDED CHANGE:	Install a cool/high-reflectance roof (coating that is white or has special reflective pigments that reflect sunlight) on at least 75% of the total roof area of the development, with a minimum SRI (solar reflectance index value) of 39 and in accordance with the standards set by the HVWZ.
	COMMENTS:	*Through additional criteria (#+25, later in this table), the ULI team has made the distinction between a relatively inexpensive white paint "cool roof" and the more expensive alternative, a green roof. Cool roofs may be easier to implement but may not be very efficient over the long term because they lose reflective capacity. Green roofs merit more points.* *The number 39 is the SRI number from LEED v4 credit SS7.2.*
#13	**ORIGINAL DRAFT:**	**Generate no less than 25% of the electricity expected to be used by the development from on-site solar and/or wind energy sources**

	RECOMMENDED CHANGE:	~~Generate no less than 25% of the electricity expected to be used by the development from on-site solar and/or wind energy sources~~ [DELETE]
	COMMENTS:	*See comments for #9.*
#14	**ORIGINAL DRAFT:**	**Generate no less than 25% of the electricity needed expected to be used by the development from on-site solar and/or wind energy sources**
	RECOMMENDED CHANGE:	~~Generate no less than 25% of the electricity needed expected to be used by the development from on-site solar and/or wind energy sources~~ [DELETE]
	COMMENTS:	*See comments for #9. Appears to be the same as #13.*
#15	**ORIGINAL DRAFT:**	**Install a geothermal energy heating & cooling system serving all residential units and common areas**
	RECOMMENDED CHANGE:	Install a geothermal energy heating & cooling system <u>that serves at least 75% of the project's residential units.</u>
	COMMENTS:	*Many geothermal projects can cover the majority of residential units, but need to utilize different means (like mini splits) for storage areas, small commercial units, and some other common areas, etc. The Pearl development in Tampa Heights is a good example of this. The ULI team has added more flexibility to this criterion to avoid disqualifying projects of merit from receiving points and to avoid the unintended consequence of disincentivizing developers from pursuing geothermal energy because the threshold for points feels unattainable.*
#16	**ORIGINAL DRAFT:**	**Equip the project with at least one alternative, independent source of electricity supply so that the project is capable of fully operating if a primary source of power experiences interruption**
	RECOMMENDED CHANGE:	~~Equip the project with at least one alternative, independent source of electricity supply so that the project is capable of fully operating if a primary source of power experiences interruption~~ [DELETE]

	COMMENTS:	*Feels redundant and can be achieved through criteria #9, #11 and #23*
#17	**ORIGINAL DRAFT:**	**Pre-wire all units to accept power provided by on-site solar panels and/or wind turbines**
	RECOMMENDED CHANGE:	None
	COMMENTS:	*This is forward thinking and will allow developments to retrofit and add renewable sources as they become more economically feasible. Norfolk has a similar option.*
#18	**ORIGINAL DRAFT:**	**Install a 20+ SEER HVAC system in each dwelling unit**
	RECOMMENDED CHANGE:	None
	COMMENTS:	*ULI team agreed with promotion of highest SEER values*
#19	**ORIGINAL DRAFT:**	**Install a 16-19 SEER HVAC system in each dwelling unit**
	RECOMMENDED CHANGE:	None
	COMMENTS:	*ULI team agreed with promotion of higher SEER values.*
#20	**ORIGINAL DRAFT:**	**Install multi-room mini-split heating and cooling systems in each unit**

	RECOMMENDED CHANGE:	Install efficient, zone-controlled heating and cooling systems in each residential unit (mini-splits, or smart thermostats, etc.)
	COMMENTS:	*Expanded criterion definition beyond only mini-splits*
#21	**ORIGINAL DRAFT:**	**Install a solar or tank-less water heating system in each unit**
	RECOMMENDED CHANGE:	Install a solar or tank-less water heating system in each residential unit
	COMMENTS:	*None*
#22	**ORIGINAL DRAFT:**	**Install no fewer than 2 operable windows on no fewer than two exterior walls in each unit**
	RECOMMENDED CHANGE:	*Cross ventilation for each residential unit (no less than 2 openings)*
	COMMENTS:	*Avoid unintended consequences and edit this to be broader. Goal is to encourage flow through ventilation in case of power outages.*
#23	**ORIGINAL DRAFT:**	**Install a generator for power generation to keep critical functions (refrigerator, freezer, basic lighting, healthcare appliances, etc.) working in the event of power failure**
	RECOMMENDED CHANGE:	Install a generator for power generation to keep critical functions working in the event of power failure: (A) Life Safety Features* — XX Points (B) (A) + Refrigerators, Freezers, Healthcare Appliances — XX Points (C) (A) + (B) + HVAC in common area — XX Points (D) (A) + (B) + (C) + HVAC in each residential unit — XX Points *Types of circuits that promote "Life Safety" to be powered by emergency generators which are in addition to current requirements of Emergency exit lighting requirements (i.e., NFPA): • Emergency exit lighting that recharges batteries of emergency exit lighting.

		• Overhead lighting, for every other fixture in common areas. (greater than NFPA emergency generator minimum requirements)
	COMMENTS:	*To encourage the installation of on-site generators in multi-family developments large and small, we have created a sliding point scale to reward different levels of generator coverage. Restoration of at least minimum life safety features in a multifamily development will be critical component to getting residents back into their residences and ultimately restoring services after an evacuation event.*
#24	**ORIGINAL DRAFT:**	**Install highly-reflective blinds/shades or window film/tint to reduce solar gain**
	RECOMMENDED CHANGE:	Install highly-reflective blinds/shades, low-E window film/tint, external/structural shade to reduce solar gain.
	COMMENTS:	*None*
TABLE 2: ADDITIONAL/NEW CRITERIA PROPOSED BY ULI TEAM (Not in the original draft of point system)		
+25	**NEW CRITERIA**	**Incorporation of a Green Roof to reduce stormwater-runoff and solar gain.** (A green roof is a layer of vegetation planted over a waterproofing system that is installed on top of a flat or slightly–sloped roof). ○ 10% of Total Roof Area = XX Points ○ 30% of Total Roof Area = XX Points ○ 50% of Total Roof Area = XX Points ○ 75%+ of Total Roof Area = XX Points
	COMMENTS:	*The ULI team thought it was important to make a distinction between a cool roof (#12) and a green roof – and offer both in the point system. A green roof is more expensive to build and maintain and has the added benefit of reducing stormwater runoff. A green roof should earn more points than a cool roof. Building in a points scale to this criterion recognizes that a completely green roof may not be attainable, but a partial green roof still warrants points. Some projects may combine both a partial green roof and partial cool roof – earning points from both criteria.*

+26	**NEW CRITERIA**	**Natural Buffers: Setbacks are determined by zoning. Extra points can be earned for nature-based features in addition to setback.** **a. Stormwater Retention** (bioswales, rain gardens, rainwater harvesting/cisterns, stormwater harvesting, etc.) **b. Appropriate and beneficial plantings** (native, drought tolerant, salt adapted)
	COMMENTS:	*Worth noting -- To encourage the practice of using stormwater as an asset, Pinellas County has included incentives within its Land Development Code that allow open space requirements to be satisfied through green infrastructure stormwater management techniques. Refer to Chapter 138, Zoning, of the County Land Development Code.*
+27	**NEW CRITERIA**	**Contribution to conservation fund in lieu of ability to achieve points in the 'Nature Based Solutions' component**
	COMMENTS:	*Zoning administrator should devise a system for what constitutes as an appropriate contribution amount based on project size/number of units and relative to the cost of the other 'Nature Based Solutions' criteria for earning points. The conservation funds could go towards purchasing lands for preservation and retreat in the most vulnerable areas of the CHHA and/or repetitive loss areas.*
+28	**NEW CRITERIA**	**Devote space onsite to the creation of a community serving Resilience Hub.** [Defined as community-serving facilities meant to both support residents of the surrounding area and coordinate resource distribution and services before, during or after a natural hazard event. The hub should be resourced by community organizations to meet the needs of the community during an extreme event, meaning it must maintain food, water, and emergency supplies. Hubs should be able to remain operational during an extended power outage, ideally relying on multiple types of energy generation such as solar and storage.]
	COMMENTS:	https://www.usdn.org/uploads/cms/documents/usdn_resiliencehubs_2018.pdf

+29	**NEW CRITERIA**	**Incorporate and plan for a Resilient Common Area that serves residents of the project.** This space should meet the needs of residents during and (most importantly) immediately following an extreme event, meaning it must maintain food, water, and emergency supplies. The Common Area's HVAC, basic lighting and outlet power should be able to remain operational during an extended power outage, ideally relying on multiple types of energy generation such as solar and storage.
	COMMENTS:	*As we learned from Hurricane Irma, having a space onsite with air-conditioning, power for phone charging, water, etc. for residents during post-storm recovery and prolonged power outages is critically important and can reduce the burden on city resources.*
+30	**NEW CRITERIA**	**Contribution to Emergency Shelter Fund to help pay for upgrades to existing shelters and the construction of new shelters**
	COMMENTS:	*Planning staff & Emergency Management should devise a system for what constitutes an appropriate contribution amount based on project size/number of units and relative to the cost of the other 'Recovery' criteria for earning points.*
+31	**NEW CRITERIA**	**Innovation Points** (Resilient solutions beyond those found in this table will be considered for points at the discretion of the zoning administrator)
	COMMENTS:	*In recognition of the fact that (a) the proposed CHHA LDR Code Amendment covers a wide range of multifamily project types and scale, and (b) the technologies and innovation driving resilient solutions for coastal communities are constantly evolving – the ULI team strongly recommends including the opportunity to earn "Innovation Points" in each of the four Resilience Components that make up the points system.* *This gives developers the flexibility to pursue innovative resilient solutions best suited for their projects and makes the code adaptable to advancements in resilient technologies. Innovation points should be considered and allotted at the discretion of the zoning administrator.*

Table 3 below:

1. **Categorizes the Development Activities/ Points Criteria into 4 components:**
   a. Structural Mitigation
   b. Energy Efficiency
   c. Nature Based Solutions
   d. Recovery

2. **Rates the criteria by**
   a. Resilience Value
   b. Cost to Developer

This table reflects the recommended changes of the ULI team as outlined in tables 1 and 2 above.

TABLE 3: POINT SYSTEM FOR MULTI-FAMILY RESIDENTIAL DEVELOPMENT

COMPONENT 1: STRUCTURAL MITIGATION			
	DEVELOPMENT ACTIVITY	RESILIENCE VALUE	EXPECTED COST
S1	**Construct building to meet design requirements of next higher classification of Risk Category, per ASCE 7** OR **Increase design wind speed from ASCE-7 recommendations and apply Miami-Dade High Velocity Hurricane Zone (HVHZ) standards for current classification of Risk Category** OR **Increase design wind speed from ASCE-7 recommendations and apply Miami-Dade High Velocity Hurricane Zone (HVHZ) standards of the next higher classification of Risk Category, per ASCE 7**	HIGH	HIGH
S2	**Elevate the first habitable/residential floor beyond the required Base Flood Elevation (BFE) + 2 feet of Freeboard:** - XX points for each additional foot of elevation above 2ft+ BFE	HIGH	HIGH

S3	**Elevate the mechanical system beyond the required Base Flood Elevation (BFE) + 2 feet:** • XX points for each additional foot of elevation above 2ft+ BFE, up to XX feet OR • XX points for installing mechanical, electrical and plumbing (MEP) equipment or back-up systems such as generators on the roof OR an ancillary structure that elevated to the most conservative flood elevation produced by the recent SLOSH model.	HIGH	LOW
S4	**Construct an impact-resistant roof OR fully-adhered roof with parapets located every 3 feet**	HIGH	LOW
S5	**Design building located in the Coastal A Flood Zone to Flood Zone V standards or the most conservative (highest) flood elevation produced by the recent SLOSH model.**	HIGH	HIGH
S6	**Innovation Points**	-	-
	COMPONENT 2: ENERGY EFFICIENCY		
	DEVELOPMENT ACTIVITY	RESILIENCE VALUE	EXPECTED COST
E1	**Renewable Energy Sources:** Generate a percentage (see options below) of the electricity expected to be used by the development from on-site solar and/or wind energy sources: e) 75–100% = XX points f) 50-74% = XX points g) 26-49% = XX points h) At least 25% = XX points	HIGH	HIGH

<table>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>E2</td><td>On-site battery storage of solar generated power to keep critical functions working in the event of power failure:
<table>
<tr><td>(A)</td><td>Life Safety Features*</td><td>XX Points</td></tr>
<tr><td>(B)</td><td>(A) + At least 100% of Normal Load of Common Areas</td><td>XX Points</td></tr>
<tr><td>(C)</td><td>(A) + (B) + Lighting & Refrigeration Residential Units</td><td>XX Points</td></tr>
<tr><td>(D)</td><td>(A) + (B) + (C) + HVAC in Residential Units</td><td>XX Points</td></tr>
<tr><td>(D)</td><td>80-100% of Normal Load of Entire Building</td><td>XX Points</td></tr>
</table>
*Types of circuits that promote “Life Safety” to be powered by onsite battery storage which are in addition to current requirements of Emergency exit lighting requirements (i.e., NFPA):

Emergency exit lighting that recharges batteries of emergency exit lighting.
Overhead lighting, for every other fixture in common areas. (greater than NFPA emergency generator minimum requirements)
</td><td>HIGH</td><td>HIGH</td></tr>
<tr><td>E3</td><td>Install a geothermal energy heating & cooling system that serves at least 75% of the project’s residential units.</td><td>MED</td><td>HIGH</td></tr>
<tr><td>E4</td><td>Install a cool/high-reflectance roof (coating that is white or has special reflective pigments that reflect sunlight) on at least 75% of the total roof area of the development, with a minimum SRI (solar reflectance index value) of 39 and in accordance with the standards set by the HVWZ.</td><td>LOW</td><td>LOW</td></tr>
<tr><td>E5</td><td>Pre-wire all units to accept power provided by on-site solar panels and/or wind turbines</td><td>LOW</td><td>LOW</td></tr>
<tr><td>E6</td><td>Install a 20+ SEER HVAC system in each dwelling unit</td><td>MED</td><td>MED</td></tr>
<tr><td>E7</td><td>Install a 16-19 SEER HVAC system in each dwelling unit</td><td>MED</td><td>MED</td></tr>
</table>

E8	**Install efficient, zone-controlled heating and cooling systems in each residential unit** (mini-splits, or smart thermostats, etc.)	MED	MED
E9	**Install a solar or tank-less water heating system in each residential unit**	LOW	LOW
E10	**Cross ventilation for each residential unit (no less than 2 openings)**	LOW	LOW
E11	**Install highly-reflective blinds/shades, low-E window film/tint, external/structural shade to reduce solar gain.**	LOW	LOW
E12	**Innovation**	-	-
	Component 3: Nature Based Solutions		
N1	**Protect coastal property with a living shoreline (LSL) per the US Army Corps of Engineers (USACE) Living Shoreline Permit Standard.** *(LSLs use natural materials to stabilize the shoreline and maintain valuable fish and wildlife habitat; LSLs utilize a variety of materials such as wetland plants, oyster shell, coir fiber logs, sand, wood, and native rock.)*	MED	MED
N2	**Incorporation of a Green Roof to reduce stormwater-runoff and solar gain.** (A green roof is a layer of vegetation planted over a waterproofing system that is installed on top of a flat or slightly–sloped roof). ○ 10% of Total Roof Area = XX Points ○ 30% of Total Roof Area = XX Points ○ 50% of Total Roof Area = XX Points ○ 75%+ of Total Roof Area = XX Points	MED	MED
N3	**Natural Buffers: Setbacks are determined by zoning. Extra points can be earned for nature-based features in addition to setback.** **a. Stormwater Retention** (bioswales, rain gardens, rainwater harvesting/cisterns, stormwater harvesting, etc.) **b. Appropriate and beneficial plantings** (native, drought tolerant, salt adapted)	MED	LOW

N4	**Contribution to conservation fund in lieu of ability to achieve points in the 'Nature Based Solutions' component**	HIGH	MED
N5	**Innovation**	-	-
	Component 4: Recovery		
R1	**Illumination and natural daylighting**	HIGH	LOW
R2	**Install a generator for power generation to keep critical functions working in the event of power failure:** (A) Life Safety Features* — XX Points (B) (A) + Refrigerators, Freezers, Healthcare Appliances — XX Points (C) (A) + (B) + HVAC in common area — XX Points (D) (A) + (B) + (C) + HVAC in each residential unit — XX Points *Types of circuits that promote "Life Safety" to be powered by emergency generators which are in addition to current requirements of Emergency exit lighting requirements (i.e., NFPA): • Emergency exit lighting that recharges batteries of emergency exit lighting. • Overhead lighting, for every other fixture in common areas. (greater than NFPA emergency generator minimum requirements)	HIGH	HIGH
R3	**Devote space onsite to the creation of a community serving Resilience Hub.**	LOW	LOW
R4	**Incorporate and plan for a Resilient Common Area that serves residents of the project.**	LOW	LOW
R5	**Contribution to Emergency Shelter Fund to help pay for upgrades to existing shelters and the construction of new shelters**	HIGH	MED
R6	**Innovation Points**	-	-

Additional Recommendations

The ULI team commends the City of St. Petersburg for being proactive about hardening the CHHA to ensure that future multi-family development is resilient. Planning for the future of the CHHA

and other vulnerable areas of the city requires a balancing of sometimes competing city goals such as economic development, emergency management, resiliency, community development, workforce housing and growth management. Implementing a new approach to new multi-family development in the CHHA is a good opportunity to pilot a resilient code.

As it evaluates the implementation of this new code in the CHHA, the city should consider further increasing resiliency and reducing flood risk within the CHHA by applying elevated design standards to all development typologies. This follows the City of Norfolk example.

As the city prepares for a more resilient future and embarks on it's work for Vision 2050, other items to consider include:

- Incorporate specific resiliency goals for development and coastal defense as a guiding principle of the 2050 plan.
- Develop a more-fine grain approach to land use in the CHHA by:
    - Consider limited future density in areas that may be subject to daily tidal flooding due to sea level rise in the next couple of decades. Comprehensive infrastructure improvements should continue to be targeted in areas to prevent sunny day flooding.
    - Target specific areas for buyout, in the event of future disaster within repetitive loss geographies. These areas can serve as coastal defense.
    - In other areas that are only subject to coastal flooding by severe but infrequent storms, create a density boost that could assist in getting better resilient building stock and amenities.
    - Elsewhere, the city should consider tools to help encourage building owners to retrofit the existing building stock, at least by elevating MEP, installing water pumps, or footings for the deployment of flood panels in advance of a storm.
    - Consider a Transfer of Development Rights (TDR) / land swap solution from areas in the most vulnerable areas of the original CHHA to less vulnerable areas of the CHHA. This could boost preservation areas and result in a zero net gain of overall entitled density in the CHHA.
- Review height requirements in the CHHA to ensure there is no conflict between the elevated standard and existing requirements.
- Allow for portions of a parcel included in the CHHA to be placed into restricted development status in exchange for permitting redevelopment of remaining portion of a parcel, not within CHHA.
- Establish a fund that developers can pay into as a condition of permit for development in CHHA that either improves emergency response (i.e., hires drivers to evacuate residents), pays for improvements to existing shelters (i.e., adding food storage or generator back up to existing shelters), or contributes to the overall resiliency of the CHHA (i.e. funds grants to help vulnerable populations within the CHHA retrofit their properties with more resilient features, etc.).

CASE STUDY: THE CITY OF NORFOLK

The City of Norfolk, Virginia adopted a new zoning ordinance in January 2018 that included the goal of enhancing flood resilience and directing new more intense development to higher ground. The ordinance includes a Resilience Quotient system, which applies to all new development citywide, and establishes a Coastal Resilience Overlay (CRO) zone, where new development and redevelopment will have to comply with new flood resilience requirements, in the most flood prone areas and an Upland Resilience Overlay (URO), designed to encourage new development, in areas of the city with lower risk of flooding.

Resilient Quotient System Overview
The Resilience Quotient requires resilient development techniques to be incorporated into all new development projects, or substantial redevelopment projects. Projects where the cost of work is less than 50% of the assessed value of the building are exempt from meeting the Resilience Quotient.

Also exempted are LEED-certified buildings receiving a certification of gold or above and work on designated historic properties that maintains or enhances the historic character. (Single-family homes have a simpler method of achieving resilience available to them and thus are not a part of this discussion.) Developments not eligible for one of those exemptions must do one of the following – either meet a standard set of resilience conditions (including elevating mechanical equipment, installing systems to detain a certain amount stormwater on site, and installing systems that allow connection of generators, solar, wind or other locally generated power sources during power outages) or earn a required number of points from a point system.

For developers opting to use the point system, the number of points that must be earned in each category depend on the size and number of units included in the development proposal. For example, smaller developments of five or less dwelling units must earn 4 points, 1 each per component; larger developments of 200 or more dwelling units must earn 10 points, 2 per component. Similar scales are also included for non-residential development – per square foot of floor area. The system awards points for the following resilience measures for residential development (similar standards are tailored for non-residential development):

- Risk reduction - elevate mechanical equipment; construct impact resistant roof; construct structure to withstand 110-mile winds; and/or install hurricane resistant shutters.
- Stormwater management - install a green roof, rain-gardens, or other stormwater infiltration systems; use pervious paving systems; provide a community-garden space; preserve pre-development natural, native vegetation; provide for new tree-planting; and/or preserve large non-exotic trees on site.
- Energy resilience - generate electricity with on-site solar or wind power; install geothermal heating and cooling systems; install green walls; adopt energy efficient lighting; include wiring that allows connection to solar, wind or back-up generator; install cool roof; install solar or tankless water heating system; install back-up generator; provide EV charging stations; use vegetation to shade structure; and/or install reflective shades.

The ordinance also includes incentives for extinguishing development rights in the Coastal Resilience Overlay district. Points can be earned in the Upland Resilience zone by extinguishing development rights through acquisition of open space conservation easements or voluntary removal – via deed restriction or other method – of development rights in the CRO.

The new zoning ordinance was informed by prior planning documents: PlaNorfolk2030 (adopted in 2013), which is the city's comprehensive plan, and Norfolk Vision 2100, which was adopted in 2016 and defined the city's approach to flooding, sea-level rise, and long-term resilience.

The Resilience Quotient at a Glance

Overall

- Applies citywide to all new development and all substantial reconstructions.
- LEED Gold or equivalent properties are exempt
- Historic rehabs are exempt

Single Family

- Elevate 16 inches
- Store 200 gallons of rainwater
- Install generator switch

Multifamily

- Elevate 16 inches and capture first 1.25 inches of rainwater - *or* -
- Comply with point system requirements (3 components – risk reduction, stormwater management, energy resilience)

Non-Residential

- Elevate 8 inches and capture first 1.25 inches of rainwater - *or* -
- Comply with point system requirements (3 components – risk reduction, stormwater management, energy resilience)

Resilience Overlays

Coastal Resilience Overlay (CRO)

- Applies to all properties within a high-risk flood zone (V, A, or X-shaded)
- Requires additional 0.5 points from point system requirement for risk reduction component and stormwater management component or 25% more flood risk reduction and stormwater management capacity
- Requires native, salt tolerant plants
- Requires all parking areas and open space to be pervious
- Limits parking to 110% of the minimum required

Upland Resilience Overlay (URO)

- Applies to entire city outside high risk flood zones

- Allows up to four points to be counted towards the point system requirements for extinguishing a development right (through a conservation easement, deed restriction, or other such method) in the CRO

LESSONS LEARNED

- Include a range of options and alternatives for development, aligned with resilience goals.
- Be open and adaptive to change as the zoning code is implemented. Continually evaluate and amend, as required.
- Clearly connect the zoning code to a comprehensive strategy and goals for city-wide resiliency.
- Begin and maintain a dialogue with the local development community. Their feedback will be vital in fine-tuning the requirements.
- Track how the code is being implemented on a site-by-site basis. The innovative implementations that developers come up with can provide valuable case studies for future users.
- Be prepared to go “off book”. Each site is unique, and the code can’t possibly consider every possibility. In these unique circumstances, be prepared to adjust requirements.

Case Study: New York City

Zoning for Coastal Flood Resiliency

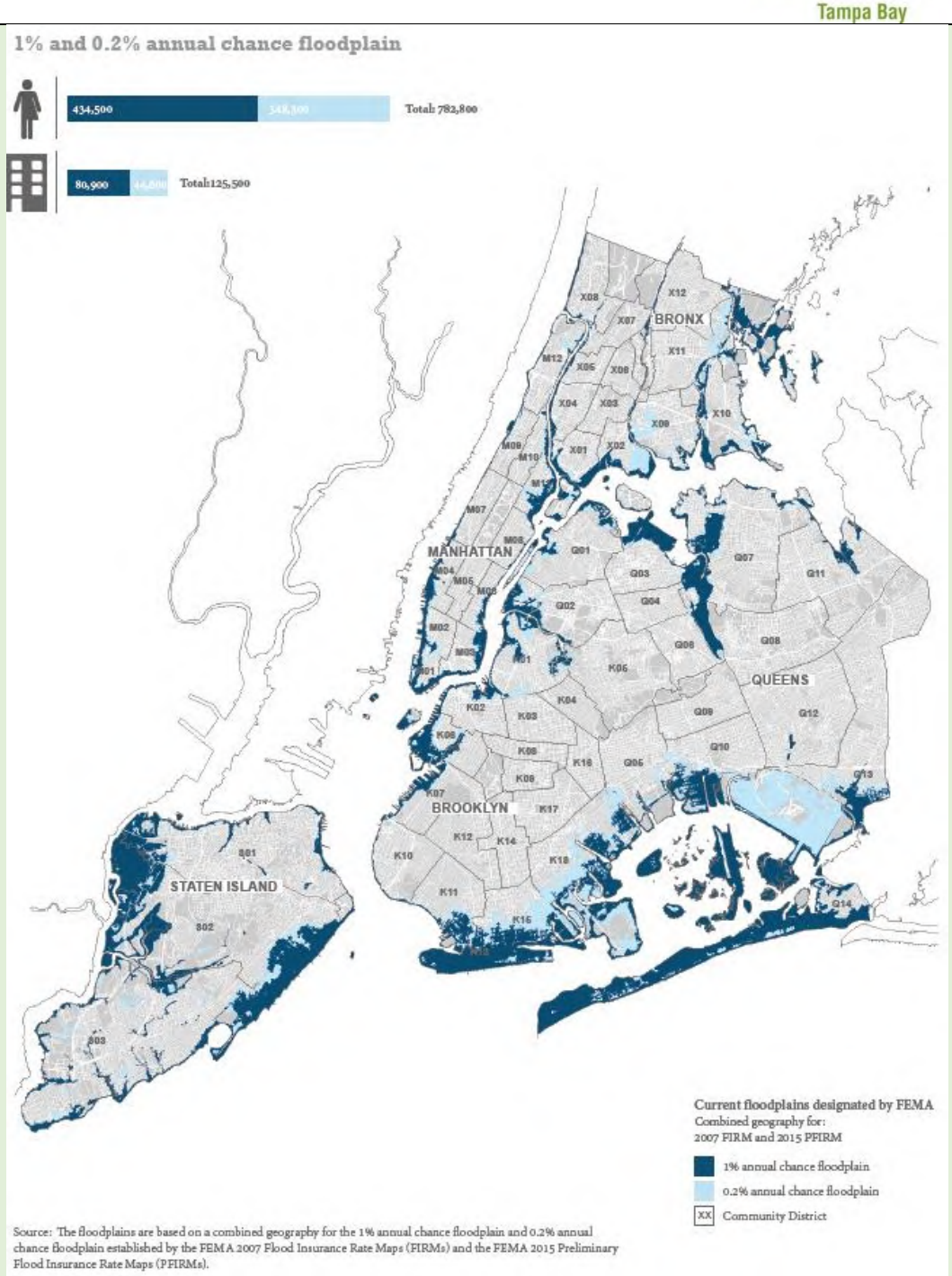
Since Hurricane Sandy in 2012, the NYC Department of City Planning (DCP) has been working with stakeholders across New York City (NYC)'s floodplain to develop zoning strategies that help promote resilient buildings and neighborhoods, and therefore reduce flood risk in the city's most vulnerable areas. This set of recommendations would improve upon and make permanent existing temporary zoning rules that were adopted on an emergency-basis after Sandy.

Zoning for Coastal Flood Resiliency would provide homeowners, business owners and practitioners living and working in the city's floodplain, the option to design or otherwise retrofit buildings to (a) reduce damage from future flood events, (b) be resilient in the long-term, and (c) potentially save on long-term flood insurance costs. Overall, implementation of Zoning for Coastal Flood Resiliency would improve the ability of the city's many flood-prone neighborhoods to withstand and recover quickly from future storms.

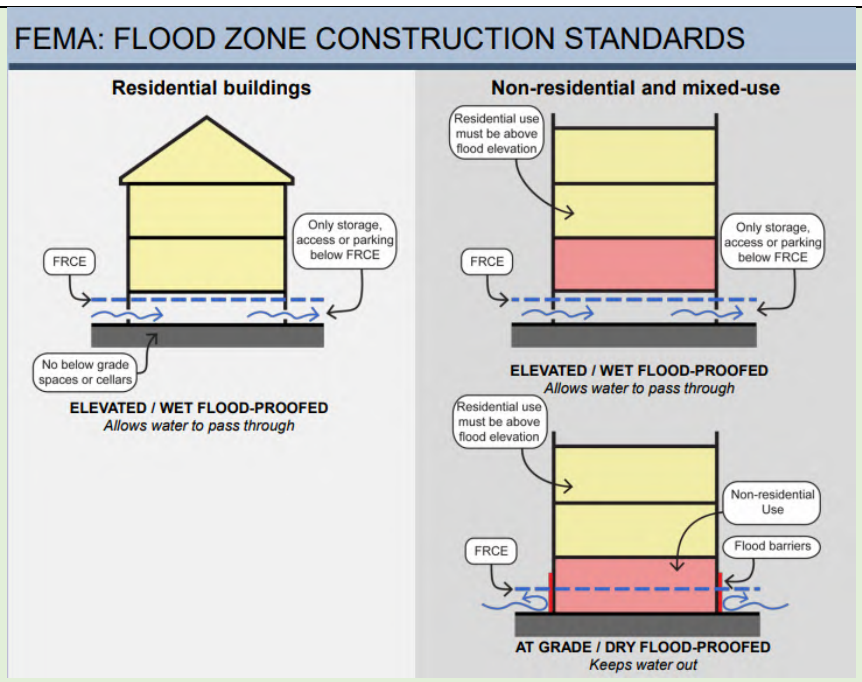
These recommendations have been drawn from lessons learned and initiatives implemented through the city's recovery efforts after Hurricane Sandy. They were developed based on analysis of resilient construction in the floodplain, through coordination with partner city agencies, and community feedback received during an extensive public engagement process.

Features of the preliminary recommendations include:

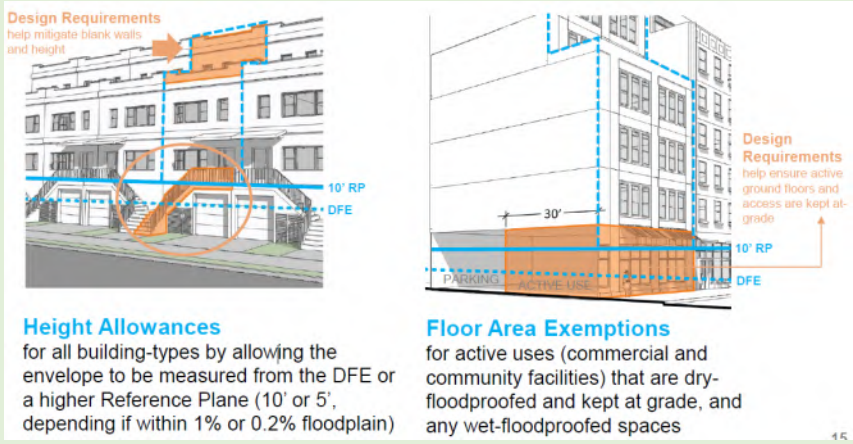
1. **An expanded geography:**
   Buildings in both the city's 1% annual chance floodplain and 0.2% annual chance floodplain would have access to rules that allow building owners to invest in resiliency improvements to fully meet or exceed flood-resistant construction standards, even when these standards are not required by the Federal Emergency Management Agency (FEMA) and Appendix G of the NYC Building Code.



2. **An enhanced building envelope:**
   Zoning allowances coupled with enhanced design requirements would allow building owners to better accommodate sea level rise projections when designing new buildings or retrofitting existing ones, without creating negative impacts on the streetscape. This would increase the building's and its content's safety and allow flood insurance costs to be reduced, while ensuring an accessible design that makes the streetscape more inviting.

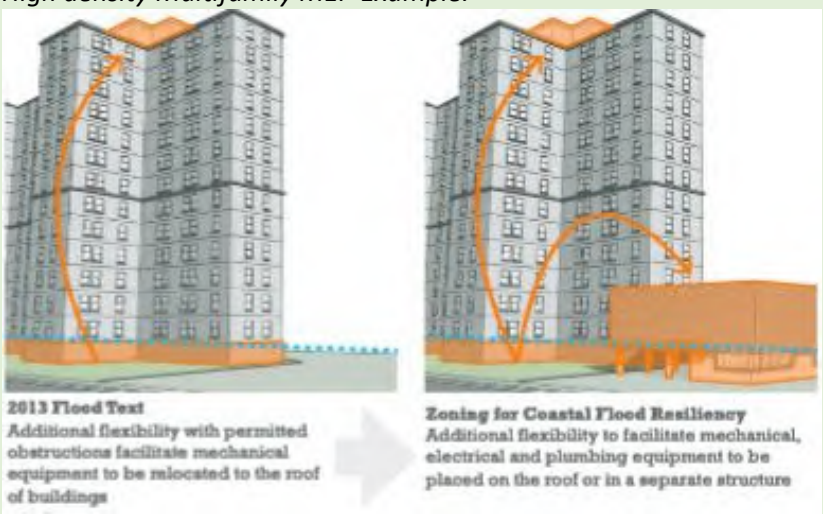

FEMA: FLOOD ZONE CONSTRUCTION STANDARDS
Residential buildings
FRCE
Only storage, access or parking below FRCE
No below grade spaces or cellars
ELEVATED / WET FLOOD-PROOFED
Allows water to pass through
Non-residential and mixed-use
Residential use must be above flood elevation
FRCE
Only storage, access or parking below FRCE
ELEVATED / WET FLOOD-PROOFED
Allows water to pass through
Residential use must be above flood elevation
Non-residential Use
Flood barriers
FRCE
AT GRADE / DRY FLOOD-PROOFED
Keeps water out

Raise the first level above the FRCE
12' above floor level
Option 1:
Wet-Flood Proof portion of commercial space exempted from floor area calculations
FRCE

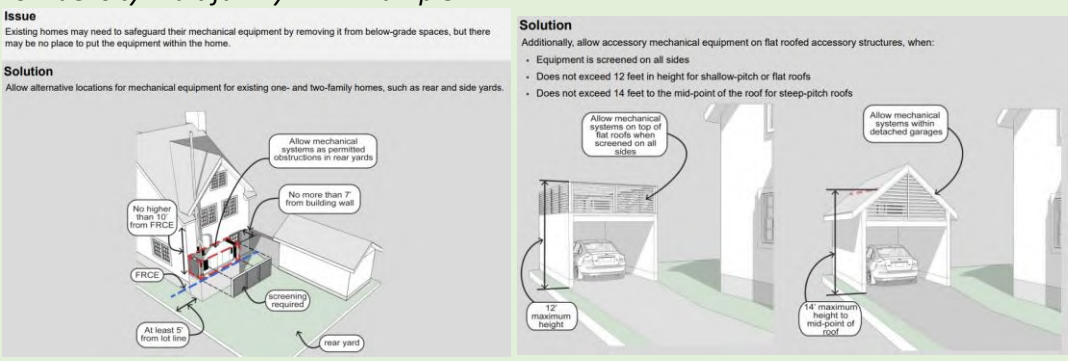

Design Requirements
help mitigate blank walls and height
10' RP
DFE
Height Allowances
for all building-types by allowing the envelope to be measured from the DFE or a higher Reference Plane (10' or 5', depending if within 1% or 0.2% floodplain)
30'
Design Requirements
help ensure active ground floors and access are kept at-grade
10' RP
DFE
PARKING
ACTIVE USE
Floor Area Exemptions
for active uses (commercial and community facilities) that are dry-floodproofed and kept at grade, and any wet-floodproofed spaces

3. **Alternatives for the relocation of important equipment:**
   Building owners would have additional zoning flexibility to relocate mechanical, electrical and plumbing (MEP) equipment or install back-up systems such as generators above areas at risk of being flooded, including on roofs or in new separate structures.

   High density Multifamily MEP Example:



   Low density Multifamily MEP Example:



   https://www1.nyc.gov/assets/planning/download/pdf/zoning/districts-tools/flood-test/flood-text-overview-presentation.pdf

4. **A zoning framework that facilitates recovery from future disasters:**
   Rules that make it easier for damaged buildings to be reconstructed would be enabled in the event of a future disaster. This would allow residents and neighborhoods to recover faster and allow the city to more quickly offer disaster assistance to those who are impacted.

Reconstruction allowances
Substantially-damaged non-conforming or non-complying buildings can rebuild to at least minimum resiliency standards

Documentation process
Aerial photographs/tax bills can be used to establish the existence of a building. A survey may be used to document non-compliances

In the long-term, Zoning for Coastal Flood Resiliency, in conjunction with coastal protection strategies and infrastructure improvements that are being pursued by the city and other state and federal agencies, will help to fully realize the vision of a more resilient NYC. To learn more, please visit: https://www1.nyc.gov/assets/planning/download/pdf/plans-studies/flood-resiliency-update/zoning-for-flood-resiliency.pdf

Other resiliency initiatives

Aside from Zoning for Coastal Flood Resiliency, DCP also works in shaping NYC's waterfront and waterways to promote growth, equity, resiliency and sustainability. This work is mainly conducted through the NYC Waterfront Revitalization Program (WRP), which establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront. Projects that require certain federal, state and local discretionary actions that are located within and/or affect the Coastal Zone are reviewed by a relevant government agency to assess the consistency of a proposed activity or project with the WRP's ten policies.

One of these policies–Policy 6.2–sets guidelines for climate change adaptation, which requires applicants identify the site's vulnerabilities to coastal hazards, such as flooding, wave action, and erosion, and to demonstrate how the proposed design will address these vulnerabilities. It also guides applicants to refer to the Climate Resiliency Design Guidelines developed by the Mayor's Office of Resiliency, which recommend buildings to be designed to the 50th percentile sea level rise projections over the project's anticipated useful life, in addition to freeboard required by the Building Code.

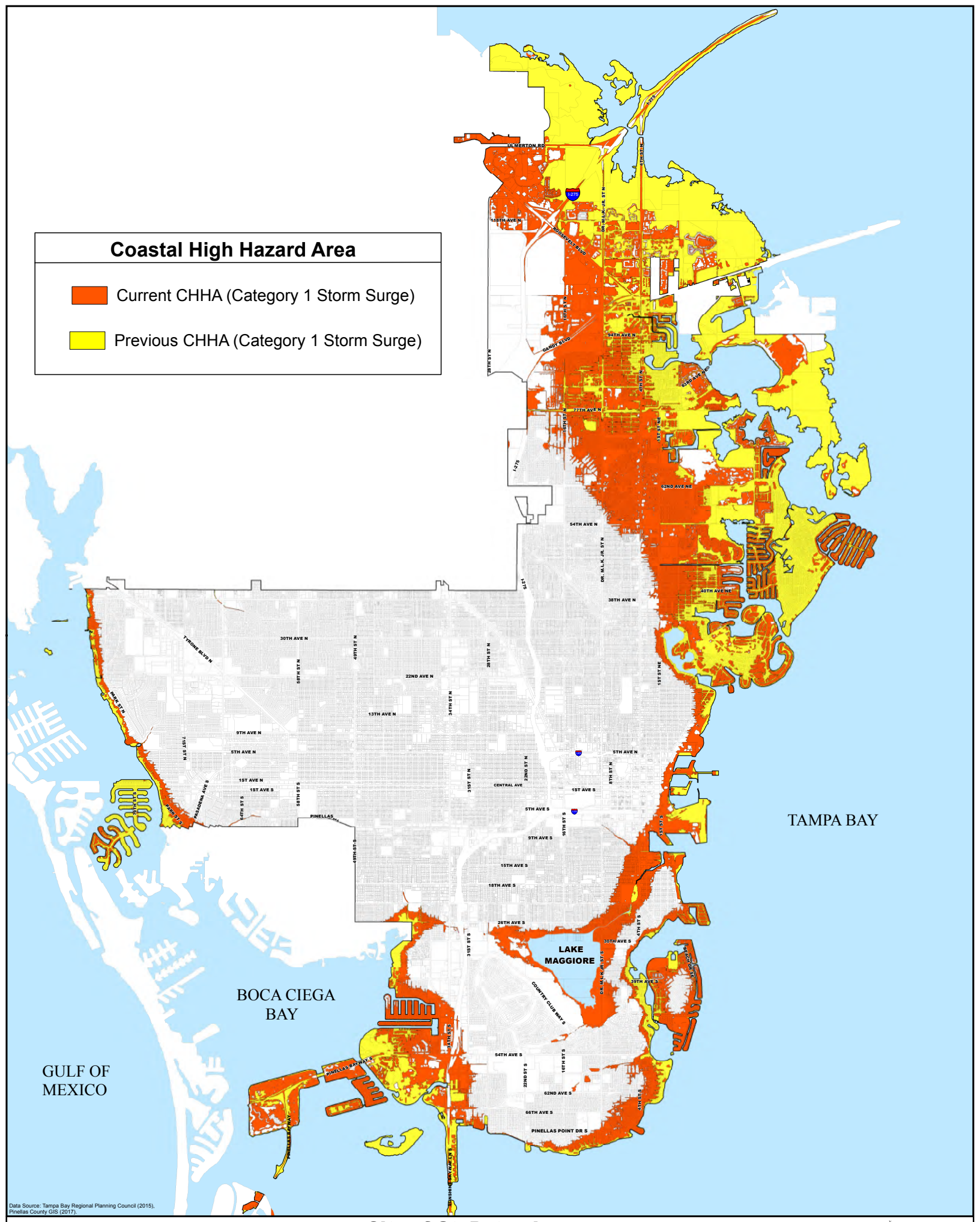
The following link takes you to a document that NYC uses for waterfront development which dictates design strategies for shorelines under Policy 6.2:
https://www1.nyc.gov/assets/planning/download/pdf/applicants/wrp/revisions-2017/policy-62-guidance-document-nov2018.pdf

In addition to the WRP review, waterfront development is also shaped by Article VI, Chapter 2 of the NYC's Zoning Resolution, which addresses the form, size and location of new development, and the amount and quality of required waterfront public access areas. One of its main regulations, require

developments to maintain an open area along the shoreline, which is referred to as the waterfront yard. All residential and commercial developments are required to provide a waterfront yard that is 30 to 40 feet wide, depending on the district, along the entire shoreline. While this rule mainly serves the objective of allowing for the public access to the waterfront, it also helps protect natural resources in environmentally sensitive areas along the shore.

In the context of flood resiliency, required setbacks can also be useful as an interim measure to help prepare cities to be able to implement coastal protection measures and have the space to accommodate future resilient infrastructure investments.

For more information, please consult the following link:
https://www1.nyc.gov/site/planning/zoning/districts-tools/waterfront-zoning.page



March 2017

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Planning and Economic Development Department

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ATTACHMENT D: TAMPA BAY CLIMATE SCIENCE ADVISORY PANEL REPORT

RECOMMENDED PROJECTIONS OF SEA LEVEL RISE IN THE TAMPA BAY REGION

Tampa Bay Climate Science Advisory Panel

Updated April 2019

RECOMMENDED PROJECTIONS OF SEA LEVEL RISE IN THE TAMPA BAY REGION

Executive Summary

In this document, the Tampa Bay Climate Science Advisory Panel (CSAP) recommends a common set of sea level rise (SLR) projections for use throughout the Tampa Bay region. The recommendation establishes the foundation for a coordinated approach to address the effects of a changing climate, which advances the objectives of the newly-established Tampa Bay Regional Resiliency Coalition. Local governments and other agencies planning for SLR in the Tampa Bay region should incorporate the following key findings of this CSAP recommendation.

- Data measured at the St. Petersburg tide gauge shows that water levels in Tampa Bay have already increased approximately 7.8 inches since 1946.
- Based upon a thorough assessment of scientific data and literature, the Tampa Bay region can expect to see an additional 2 to 8.5 feet of SLR by 2100.
- Projections of SLR should be consistent with present and future National Climate Assessment estimates and methods. The NOAA Low scenario should not be used for planning purposes.
- Projections of SLR should be regionally corrected using St. Petersburg tide gauge data.
- Adaptation planning should employ a scenario-based approach that, at minimum, considers location, time horizon, and risk tolerance.

Introduction

Formed in spring 2014, the CSAP is an ad hoc network of scientists and resource managers working in the Tampa Bay region (Figure 1). The group's goal is to collaboratively develop science-based recommendations for local governments and regional agencies as they respond to climate change, including associated sea level change. The CSAP first released a recommended projection of SLR in the Tampa Bay region in 2015. The original recommendation (CSAP 2015) included a set of projections that were regionally-corrected to the St. Petersburg tide gauge and consistent with the Third National Climate Assessment (NCA3). The original guidance called for the recommendation to be revisited at a minimum of every five years, or sooner if significant new scientific information on future SLR became available.

Figure 1. Map of the four county region served by the CSAP.

This document, which is an update of the 2015 report, assesses the Fourth National Climate Assessment (NCA4) that was released in November 2018 and recently published literature synthesizing observed changes in sea level using satellite altimetry (Nerem et al. 2018). The update explains the technical methods used to produce

SLR projections and offers the rationale for the selection of SLR projections recommended for the Tampa Bay region through 2100. With these shared projections, local governments can coordinate, develop, and implement appropriate coastal adaptation and risk reduction strategies.

The Tampa Bay region, with nearly 700 miles of shoreline and 3 million residents- most of whom live near Tampa Bay or the Gulf of Mexico - is highly vulnerable to the potential effects of SLR (BEBR 2019). Citizens, emergency managers, and regional leaders have been accustomed to thinking of hazards in terms of the episodic effects of hurricanes or coastal storms; however, it is also important for local governments and regional agencies to consider the long-term, sustained effects of SLR on real property, quality of life, and perhaps most importantly, our ability to sustain growth in the regional economy.

The Tampa Bay regional economy is closely tied to both the Gulf of Mexico and Tampa Bay. It is valued at $170 billion, with $51 billion directly influenced by the bay itself (TBEP and TBRPC 2014). A number of recent reports have identified the Tampa Bay region as one of the most vulnerable coastal metropolitan areas throughout the world due to SLR and flooding (World Bank 2013, Climate Central 2017). Regional measurements show the Tampa Bay region is already experiencing SLR (Figure 2) and there is broad scientific consensus that this trend will continue on into the next century. If adaptation strategies are not implemented, cities throughout the Tampa Bay region will likely experience the following conditions, all of which may incur substantial economic costs:

- Flooding of public infrastructure and private property;
- Shoreline and beach erosion;
- Impacts to the operation of coastal drainage systems;
- Threats to drinking water and wastewater treatment facilities and distribution infrastructure; and
- Shifts in wetlands and other tidal habitats, resulting in the loss of ecosystem services.

The economic costs of inaction given the known threats of SLR must be carefully weighed against the costs of implementing adaptation strategies, technological solutions, and infrastructure investments necessary to protect the health, safety, and quality of life for the community. The Tampa Bay Regional Planning Council estimates that without a coordinated response, the regional economy may lose more than $15 billion in real estate value, $5 billion in property tax revenue, and approximately 17,000 jobs as a direct result of SLR (TBRPC 2017). However, local governments in the Tampa Bay region should feel confident that there are viable opportunities to implement adaptation strategies that increase resilience to SLR and other coastal hazards and protect the region from substantial economic losses. These opportunities benefit from a common set of regional SLR projections that promote coordinated planning and policy efforts; providing such a projection is the fundamental purpose of this recommendation.

Technical Methods and Recommendations

Estimates of future SLR are typically expressed by plotting or tabulating a quadratic function. This function is chosen because it is the simplest mathematical function that can effectively capture a

wide range of possible SLR scenarios, from a constant rate of increase to various accelerated rates of increase. Defining a specific SLR scenario requires three numbers: a datum, the point in time the sea level is defined to be zero; a rate of change, how rapidly sea level is changing (increasing or decreasing) at time zero; and a projection, the amount global sea level is expected to change between time zero and some point in the future[1].

Both the datum and the rate of change are defined using present day observations from a tide gauge proximate to the region of interest. Local sea level change rates reflect a variety of local factors, including vertical land motion (subsidence or uplift) and changes in estuarine and shelf hydrodynamics, regional oceanographic circulation patterns, and hydrologic cycles (river flow). So, while global measurements and projections are important for estimating SLR, local measurements and projections are needed for realistic regional planning efforts. For the Tampa Bay region, the CSAP recommends using data collected from the tide gauge located near downtown St. Petersburg to adjust the first two parameters necessary to predict regional SLR. The St. Petersburg tide gauge (NOAA 2019a) has the longest reliable period of record in the region and is consistent with other nearby tide gauges, including one located in the Gulf of Mexico at Clearwater (NOAA 2019b). Data measured at the St. Petersburg tide gauge shows that water levels in Tampa Bay have increased 7.8 inches (~1 inch/decade) since 1946 when water levels were first recorded at this tide gauge (Figure 2).

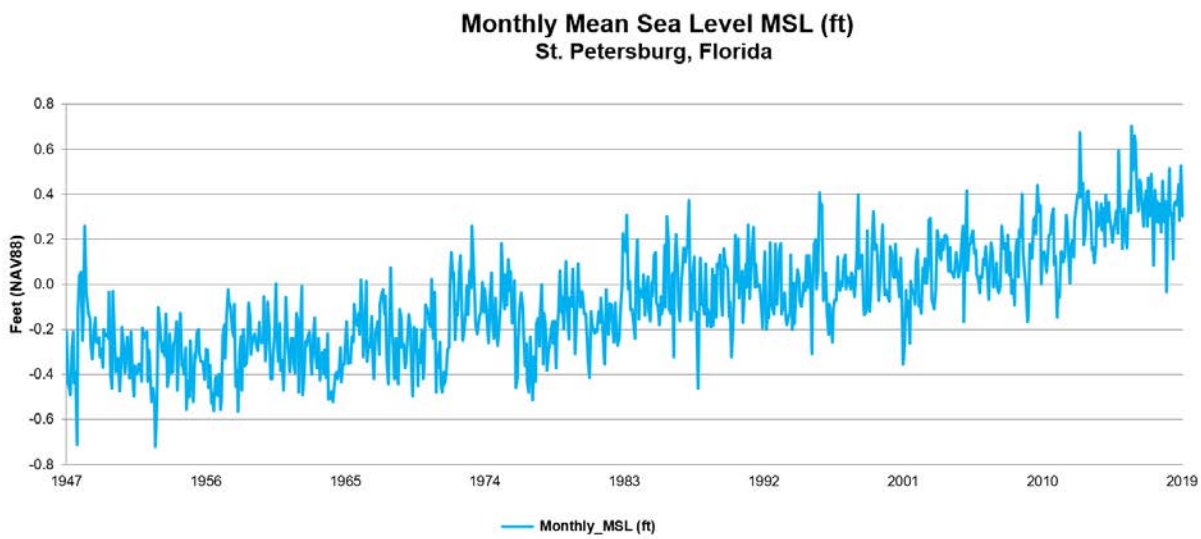

Figure 2. 1946-2018 Monthly Mean Sea Level Trend in St. Petersburg, FL, NOAA Tide Gauge #8726520

The final parameter, projections of how much sea level will change globally over the next 100 years, is derived from expert climate scientists. Currently, there are two primary sources of information regarding SLR projections: the Intergovernmental Panel on Climate Change (IPCC), and the US National Climate Assessment (NCA). Although these assessments employ different methods (IPCC relies upon numerical process models; the NCA employs a semi-empirical,

[1] Most often, this point in the future is the year 2100. However, this does not mean that SLR will stop in 2100, nor does it mean that we only know what the predicted sea level will be in 2100. The quadratic function can show possible sea levels at any point along the curve, between now, 2100, and beyond.

probabilistic approach to estimate contributions from ocean, cryosphere, geologic, and anthropogenic processes), both approaches result in similar estimates of SLR. This implies that the results obtained through either approach are robust and should provide practitioners with a higher degree of confidence in using the recommended projections for planning purposes.

The National Oceanic and Atmospheric Administration (NOAA) Technical Report, *Global and Regional Sea Level Rise Scenarios for the United States* (Sweet et al. 2017b), was produced as a coordinated, interagency task force to identify nationally agreed upon estimates for global and regional SLR to inform the 4th National Climate Assessment (hereinafter the NOAA projections). Notably, the report incorporates regional factors contributing to sea level change for the entire U.S. coastline and assigns conditional probabilities to six SLR projections based on future greenhouse gas emissions and associated ocean-atmosphere warming in order to help decisionmakers assess and manage risk (Sweet et al. 2017a). These scenarios, known as representative concentration pathways (RCPs), describe four different 21st century pathways of greenhouse gas emissions and atmospheric concentrations, air pollutant emissions, and land use (IPCC AR5) which are necessary for understanding future sea level change.

The CSAP advises that local governments and regional agencies continue to use the SLR scenarios included in the NCA, adjusted to local conditions, to inform adaptation and infrastructure planning efforts in the Tampa Bay region. Although the CSAP generally recommends following the NCA, only three of the six SLR scenarios included in the NCA4 are part of this recommendation: NOAA Intermediate-Low, Intermediate, and High. Further, until the private and public sectors make meaningful efforts to reduce greenhouse gas emissions, the CSAP advises that local governments and regional agencies assess the likelihood of the three SLR scenarios using RCP 8.5, which models climate change without additional efforts to constrain emissions (Van Vuuren et al. 2011, IPCC AR5).

Additional evidence published in 2018 was evaluated and incorporated into the updated recommendation. This recently published work, which was not available at the time the NCA4 was developed, uses satellite altimetry data to assess the rate of global sea level change (Nerem et al. 2018). Satellite radar altimeters have been measuring the open ocean surface height (sea level) since 1993 by quantifying the time it takes a radar pulse to make a round-trip from the satellite to the sea surface and back. Observed (not modeled) changes over 25 years demonstrate that the rate of SLR is increasing and that the increase is consistent with the mathematical models used to inform the IPCC and National Climate Assessment. Based on these validating observations, the NOAA Low scenario (which depicts a linear rate of rise with no projected acceleration) is very unlikely and should be excluded. Therefore, the CSAP recommends that entities planning for SLR use the NOAA Intermediate-Low scenario as the lowest plausible bound for future sea level change.

Similarly, the NOAA Extreme scenario represents the maximum ice sheet melt that is physically possible. However, the probability of this occurrence is exceptionally low and not yet supported by established science. There is, however, emerging science that suggests there may be a new instability mechanism in the ice sheets that would lead to significantly higher melt rates (Alley et

al. 2019). While this is not yet scientifically vetted, it does suggest that long-term sea level changes may be higher than the current best available science supports. Therefore, the CSAP recommends that entities planning for SLR use the NOAA High as the upper bound for future sea level change, until additional information related to ice sheet processes is settled. The CSAP will continue to monitor this rapidly-evolving field of research.

Finally, the NOAA Intermediate scenario is recommended to fully capture the plausible range of likely SLR given the probabilistic framework laid out in the NCA4.

Future SLR estimates consistent with this recommendation, that integrate data from the local St. Petersburg tide gauge, can be calculated for the Tampa Bay region using a flexible, well-supported tool developed by the US Army Corps of Engineers (USACE)[2]. The tool takes the three parameters discussed above (datum, rate of change, projection) and produces the plots or tables that describe how sea level will change in the future, such as those included as Figure 3 and Table 1.

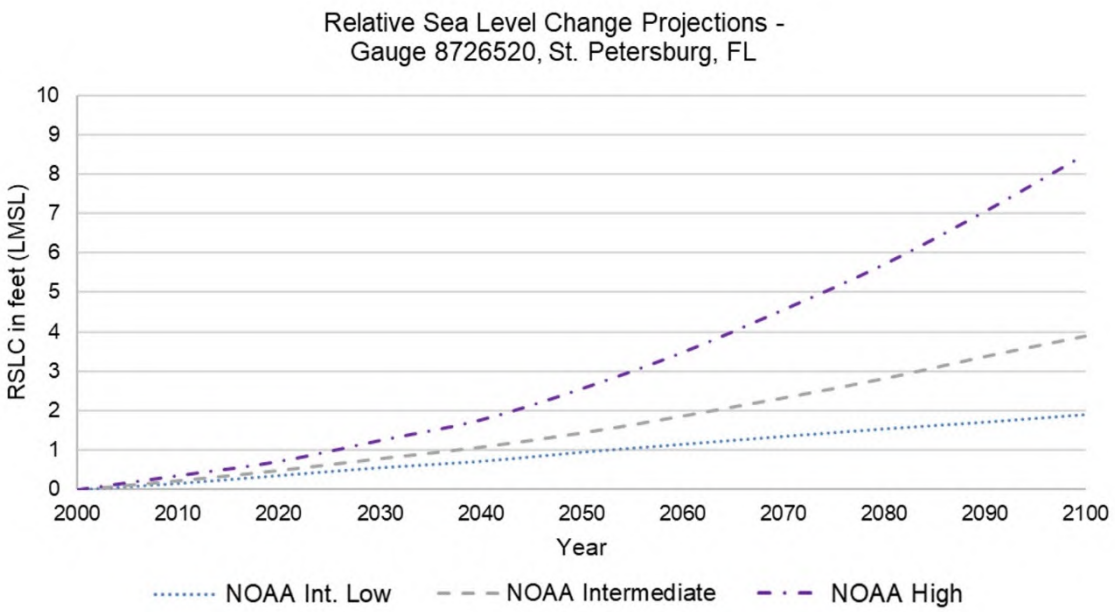

Figure 3. Graphic Relative Sea Level Change (RSLC) Scenarios for St. Petersburg, Florida, as calculated using the regionally corrected NOAA 2017 curves. (USACE 2019)

[2] When using the USACE Sea Level Change Curve Calculator Tool, first select the "St. Petersburg, FL" gauge, then choose "NOAA 2017" as the output agency. Although the CSAP recommends using the USACE Sea Level Change Curve Calculator Tool, this should not be confused with a recommendation of the USACE SLR projections. Although the USACE SLR projections produce results that are similar to that of the IPCC and NCA, they are based on equations developed in 1987 for the National Research Council (NRC) report, *Responding to Changes in Sea Level; Engineering Implications* and do not represent the best available science.

The regionally adjusted NOAA SLR projections (Table 1 and Figure 3) can be summarized as follows:

- *NOAA Intermediate Low (1.9 feet by 2100)*: This scenario represents a slight increase in the rate of SLR. Low end of *very likely* range if greenhouse gas emissions continue current trends (RCP8.5).
- *NOAA Intermediate (3.9 feet by 2100)*: This scenario represents a moderate increase in the rate of SLR. High end of *likely* range if greenhouse gas emissions continue current trends (RCP8.5).
- *NOAA High (8.5 feet by 2100)*: This scenario represents a significant increase in the rate of SLR. High end of *very likely* range if greenhouse gas emissions continue current trends (RCP8.5) and when accounting for possible ice sheet instabilities.

Year	NOAA Int-Low (feet)	NOAA Intermediate (feet)	NOAA High (feet)
2000[3]	0	0	0
2030	0.56	0.79	1.25
2040	0.72	1.08	1.77
2050	0.95	1.44	2.56
2060	1.15	1.87	3.48
2070	1.35	2.33	4.56
2080	1.54	2.82	5.71
2090	1.71	3.38	7.05
2100	1.90	3.90	8.50

Table 1. Sea Level Change Relative to the Year 2000 for St. Petersburg, Florida in Feet above Local Mean Sea Level (LMSL)

Future sea level estimates are provided in tabular form to help planners and policy makers apply the CSAP recommendations in everyday practice; however, additional clarification is necessary to ensure that the projections are used appropriately. SLR projections should only be used to determine the change in sea level between any two given time periods. For example, Table 1 shows sea level change in 2100 under the NOAA High scenario as 8.50 feet. This means that the sea level height at any location is projected to be 8.50 feet higher on average than it was at that site in the year 2000.

Similarly, consider a hypothetical situation where a local government constructs an infrastructure project in 2030. The costs and risk tolerance associated with the project are moderate. Elected officials have requested that the project withstand at least 30 years of likely SLR. Staff need to

[3] For the purposes of projecting sea level change, the year 2000 is the starting point for the recommended SLR scenarios. Although this represents a point in time the sea level is defined to be zero, it does not mean that sea level change has not occurred prior to that time.

calculate how much additional elevation to incorporate into a modified project design. The appropriate calculation to determine the necessary modifications would be as follows:

1. Select an appropriate SLR projection scenario. (NOAA Intermediate)
2. Determine the sea level at time zero. (0.79 feet)
3. Determine the projected sea level at a known point in the future. (1.87 feet)
4. Calculate the difference between projected SLR at a known point in the future and SLR at time zero. (1.08 feet)

In this example, an additional 1.08 feet above the observed sea level in 2030 would be needed to make the infrastructure project more resilient to future conditions in 2060.

Summary

Based upon a thorough assessment of scientific data and literature on SLR, the Tampa Bay region can expect to see approximately 1 to 2.5 feet SLR by 2050 and between 2 to 8.5 feet by 2100.

Given this range of uncertainty in future SLR, the CSAP recommends that local governments and other agencies consider a variety of factors, including the expected lifespan of the project, project cost, and criticality of function when developing adaptation strategies. Scenario planning offers opportunities to initiate actions now by balancing the costs of inaction against reasonable returns on investments made to reduce future impacts on the built environment (Figure 4).

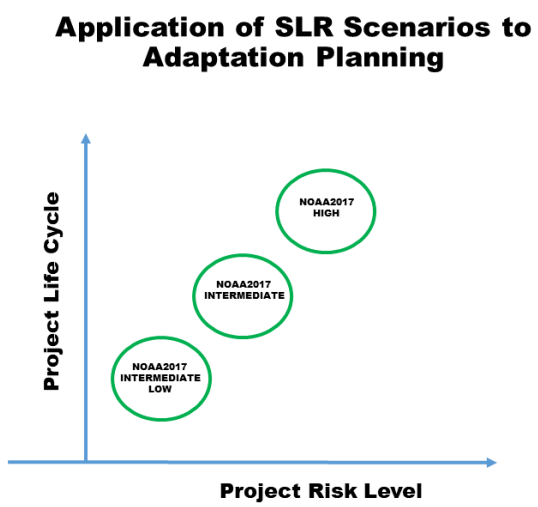

Figure 4. Conceptual diagram demonstrating how to apply SLR scenarios to risk-based decision making.

For example, decisionmakers may decide to plan for less SLR (using the NOAA Intermediate Low) when implementing projects with greater risk tolerance (such as infrastructure projects with a relatively short life cycle or those with high adaptive capacity (e.g. a waterfront park or parking lot), while they may choose to plan for more extreme SLR (using NOAA High scenario) in situations where there is little tolerance for risk (e.g. new infrastructure with a long anticipated life cycle such as a power plant) (NOAA 2012). The level of adaptation planning necessary will be up to the planning entity and based on the acceptable level of risk and vulnerability. The CSAP anticipates working with the Tampa Bay Regional Resiliency Coalition to develop detailed guidance on the appropriate application of each scenario in various risk contexts.

Selecting a common set of SLR projections throughout the Tampa Bay region will advance the objectives of the newly-established Tampa Bay Regional Resiliency Coalition, supporting the efficient development and intergovernmental sharing of vulnerability assessment information and

related policies. Furthermore, use of a regional set of projections of SLR will enable other entities to develop decision support tools, best practices, and planning documents to inform adaptation strategies for those charged with managing public infrastructure and natural resources. The CSAP recommendation is intended to further these goals, but it is important to acknowledge that scientific research advances as a continuous process. New data and technologies require refinements and reevaluation over time. In order to keep up with the best available science, the CSAP commits to revisit this recommendation in five (5) years, at a minimum, or sooner if significant new scientific information on future SLR becomes available.

Local governments and other agencies planning for SLR in the Tampa Bay region should incorporate three key findings of the CSAP recommendation:

- Projections of SLR should be consistent with present and future National Climate Assessment estimates and methods. The NOAA Low scenario should not be used for planning purposes.
- Projections of SLR should be regionally corrected using the St. Petersburg tide gauge data[4].
- Adaptation planning should employ a scenario-based approach that, at minimum, considers location, time horizon, and risk tolerance.

A resilient Tampa Bay region – one that acknowledges and responds to coastal vulnerabilities – is one that can support continued economic, environmental, and cultural prosperity for many years to come.

[4] The Cedar Key tide gauge should be used for Citrus and Hernando counties, which are part of the Tampa Bay Regional Resiliency Coalition.

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List of Acronyms

CSAP	Tampa Bay Climate Science Advisory Panel
IPCC	United Nations Intergovernmental Panel on Climate Change
LMSL	Lower Mean Sea Level (average tidal measurement)
NCA	U.S. National Climate Assessment
NCA3	3rd National Climate Assessment
NCA4	4th National Climate Assessment
NOAA	National Oceanic and Atmospheric Administration
NRC	National Research Council
NTDE	National Tidal Datum Epoch
RCP	Representative Concentration Pathway
RSLC	Relative Sea Level Change
SLR	Sea Level Rise
USACE	United States Army Corps of Engineers

Definition of Terms

Datum:	The base elevation used as a reference from which to reckon heights or depths; The point in time the sea level is defined to be zero.
National Tidal Datum Epoch:	The specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values for tidal datums. It is necessary for standardization because of periodic and apparent secular trends in sea level. The present NTDE is 1983 through 2001 (1992) and is actively considered for revision every 20-25 years.
Projection:	The numerical value of sea level change between time zero and some point in the future.
Rate of Change:	How rapidly sea level is changing (increasing or decreasing) at time zero.
Scenario:	The quadratic function that shows possible sea levels at any point along the curve, between time zero and some point in the future.
Tool:	Processes the datum, rate of change and projection to produce the plots or tables that describe how sea level will change in the future (e.g. USACE Sea Level Change Curve Calculator)

Group Composition

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Other Members: Dr. Tirusew Asefa (Tampa Bay Water); Tony Janicki (Janicki Environmental); Dr. Renee Brown (Pasco County); Dr. Hui Wang (Tampa Bay Water); Dr. Charlie Paxton (Channelside Weather); Dr. Steven Meyers (University of South Florida College of Marine Science)

ATTACHMENT E: CITY OF CLEARWATER FREEBOARD COST ANALYSIS

Floodplain Management Ordinance Discussion of Freeboard and Cumulative Substantial Improvement/Substantial Damage

BACKGROUND

Beginning with the 2010 edition, the Florida Building Code (FBC) includes the flood regulations from the model International Code Series that forms the basis of the FBC. Changes to local floodplain management regulations are necessary to properly coordinate with the FBC. The Florida Department of Emergency Management (FDEM) developed a FEMA-approved model ordinance that is coordinated with the FBC and satisfies the requirements of the National Flood Insurance Program (NFIP). It is designed to repeal and replace existing floodplain management regulations.

The Planning & Development and Engineering Departments are preparing amendments to the City's Floodplain Management Ordinance to bring the City into compliance with FDEM. It could save residents on insurance premiums from not only an improved Community Rating System (CRS) score, but also reduced rates based on the lower risk to a residence. Staff has completed research regarding two specific standards for which City Council direction is desired regarding whether to incorporate either or both of these higher standards into the proposed Ordinance. A summary of these standards and research is provided below.

FREEBOARD

Freeboard is defined as "requiring the lowest floor of residences to be higher than the base flood elevation." It provides a margin of safety against extraordinary or unknown flood risk. Base flood elevation (BFE) reflects an estimated flood risk, but other factors can cause flood heights to rise above the BFE, including wave action, tides, and development. A structure with freeboard may incur less damage which would equate to an easier and faster clean up after a storm. Dry flood proofing for commercial buildings is required up to the adopted freeboard line.

Suggested Language for Floodplain Management Ordinance (New)
Elevation Requirements. The minimum elevation requirements shall be as specified in ASCE 24 or the base flood elevation plus 2 feet (610 mm), whichever is higher.

Benefits to Insurance Premiums
Elevating buildings higher than the minimum required BFE reduces the frequency and severity of flood damage. Reflecting that reduction, NFIP flood insurance premiums are lower for individual buildings that are elevated above the minimum BFE. Freeboard provides a reduction in flood insurance premiums directly to the homeowner. An independent study conducted for FEMA determined that the incremental added cost of additional elevation can be offset within 3 years of paying flood insurance premiums. The table below is a representation of insurance savings of a residence built over the BFE based on the flood zone.

Residential Insurance Premium Savings with Freeboard

Feet of Freeboard	V Zone	A Zone
1	17%	47%
2	37%	64%
3	54%	70%

City-Sponsored Freeboard Study

The City requested Engineer of Record J. Kokolakis Contracting, Inc. to perform an assessment of what the increased cost of 2 feet of freeboard would be if provided based on two recently constructed properties (one residential, one commercial). See tables below that are excerpts from the report. Based on this assessment, the 2 feet of freeboard would increase construction cost of the residential property by 1.6% and the commercial property by 0.3%.

Increased Cost of Construction of 2 Feet of Freeboard at Residential Property

Residential Property Example XXX Eldorado Avenue	Project Value	Property Area (SSF)	Building Footprint Area (fpSF)	Building Area (BSF)
Original Values	$1,250,000.00	6,600.00	2,018.00	4,592.00
Original Cost/Area (BFE 14)		$189.39	$619.43	$272.21
2' BFE Cost Increase				
Piling - (40) pile increased 2'	$3,768.00	$0.57	$1.87	$0.82
Masonry Walls at Grade Level	$4,760.00	$0.72	$2.36	$1.04
Exterior Finish on Masonry	$3,808.00	$0.58	$1.89	$0.83
Interior Finishes on Masonry	$1,428.00	$0.22	$0.71	$0.31
Painting Interior & Exterior	$1,428.00	$0.22	$0.71	$0.31
MEP Extension Allowance	$1,000.00	$0.15	$0.50	$0.22
Subtotal Direct Cost Increases	$16,192.00	$2.45	$8.02	$3.53
Soft Cost/Indirect Costs	$4,048.00	$0.61	$2.01	$0.88
Total Cost Increase	**$20,240.00**	**$3.07**	**$10.03**	**$4.41**
Updated Project Cost (BFE 16)	$1,270,240.00	$192.46	$629.45	$276.62
Percentage Cost Increase		1.62%	1.62%	1.62%

Increased Cost of Construction of 2 Feet of Freeboard at Commercial Property

Commercial Property Example XXX S Gulfview Blvd	Project Value	Property Area (SSF)	Building Footprint Area (fpSF)	Building Area (BSF)
Original Values	$60,000,000.00	80,070.00	52,283.00	386,054.00
Original Cost/Area (BFE 14-16)		$749.34	$1,147.60	$155.42
2' BFE Cost Increase				
Piling - (400) pile increased 2'	$32,000.00	$0.40	$0.61	$0.08
Increased Grade at Footprint	$23,236.89	$0.29	$0.44	$0.06
Concrete Ramp Extensions	$1,500.00	$0.02	$0.03	$0.00
Walls at Grade Level	$34,780.00	$0.43	$0.67	$0.09
Exterior Finish on Masonry	$31,302.00	$0.39	$0.60	$0.08
Interior Finishes on Masonry	$17,390.00	$0.22	$0.33	$0.05
Railing Extensions to New Grade	$2,500.00	$0.03	$0.05	$0.01
MEP Extension Allowance	$25,000.00	$0.31	$0.48	$0.06
Subtotal Direct Cost Increases	$167,708.89	$2.09	$3.21	$0.43
Soft Cost/Indirect Costs	$33,541.78	$0.42	$0.64	$0.09
Total Cost Increase	**$201,250.67**	**$2.51**	**$3.85**	**$0.52**
Updated Project Cost (BFE 16-18)	$60,201,250.67	$751.86	$1,151.45	$155.94
Percentage Cost Increase		0.34%	0.34%	0.34%

Benefits in CRS
CRS recognizes a community's effort of going beyond minimum building standards that reduce the likelihood of flood damage. The table below demonstrates the potential of points awarded based on the freeboard requirements.

Feet of Freeboard	CRS Points
1	100
2	225
3	375

For the City to continue to improve its CRS score (i.e., to move from a 6 to a 5), in addition to more points being required, prerequisites must also be met. One of the perquisites is to have a freeboard requirement, which the City would establish in the Floodplain Management Ordinance.

It is anticipated by DEM and Florida Floodplain Managers Association that the 2020 revision of the CRS program will require at least 1 foot of freeboard to qualify for the CRS program. If this happens, points would probably only be given for freeboard requirements of 2 feet and above.

Freeboard Adopted by Other Communities
Based on information received from DEM, 148 Floodplain Management Ordinances include freeboard. An informal survey of freeboard requirements of Tampa Bay area communities is below.

Community	Freeboard Requirement (feet)
Hillsborough County	1
Belleair Bluffs	2
Dunedin	1
Indian Shores	4
Madeira Beach	2
Oldsmar	1
Pinellas County	1
Redington Shores	2
St. Petersburg	2
Seminole	1
South Pasadena	2
Treasure Island	2

CUMULATIVE SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE

The NFIP allows improvements valued up to 50% of the building's pre-improvement value to be permitted without meeting the flood protection requirements for buildings located in the Special Flood Hazard Area (SFHA). The City's current regulation allows improvement values to be re-set 1 year after permits have been closed out. Over the years,

the City may issue a succession of permits for different repairs or improvements on the same structure. This can greatly increase the overall flood damage potential to that building. Changing the regulation to 5 years (cumulative) eliminates this "loophole." This provision reduces the likelihood that property owners would deliberately phase improvements for the specific purpose of avoiding the basic 50% substantial improvement rule.

Suggested Language for Floodplain Management Ordinance (New)
Substantial Improvement/Substantial Damage. Any combination of repair, reconstruction, rehabilitation, alteration, addition or improvement of a building or structure taking place during a 5-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

Benefits in CRS
Cumulative Substantial Improvement/Substantial Damage (SI/D) is identified as CSI in the CRS User Manual. The table below demonstrates the potential of points awarded based on the cumulative substantial improvement/damage requirements.

Cumulative Timeframe	CRS Points (SI/D)
10 years	40/40
5 years	20/20

Cumulative Substantial Improvement/Substantial Damage Adopted by Other Communities
Based on information received from DEM, 29 communities use 5 years, 20 communities use 10 years, one community uses 20 years, and seven communities use life of the structure to assess cumulative impacts. The results of an informal survey of Tampa Bay area communities' cumulative substantial improvement/substantial damage timeframes is below.

Community	SI/D Timeframe
Dunedin	5 years
Indian Shores	10 years
Oldsmar	15 years
Redington Shores	5 years
Safety Harbor	Life of Structure
Treasure Island	5 years

CRS STATUS

The City has earned 2,274 CRS points based on current documentation, initiatives, and projects. These points equate to a Class 6 designation and give residents a 20% savings on flood insurance premiums in the Special Flood Hazard Area. That 20% savings equals $1,759,723 across the City.

In order to improve to a Class 5, new initiatives and projects would need to be implemented. CRS points listed in each section are the maximum number of points that could be earned; the exact score would be determined during the verification visit in 2019. Implementing freeboard and cumulative substantial improvement/substantial damage would be significant steps in getting closer to achieving a Class 5.

COASTAL HIGH HAZARD AREA (CHHA)

Committee of the Whole

July 25, 2019

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1

Definitions: CHHA, Evac Zone, SFHA

COASTAL HIGH HAZARD AREA (CHHA) F.S. 163.3178

Area below the elevation of the Category 1 storm surge line as established by a Sea, Lake and Overland Surges from Hurricanes ("SLOSH") computerized storm surge model. (Required in Comp Plan)

HURRICANE EVACUATION ZONES

Hurricane evacuation zones (A to E) reflect storm surge vulnerability and the appropriate evacuation level for Category 1 to 5 storm (hurricane) events.

SPECIAL FLOOD HAZARD AREAS (SFHA)

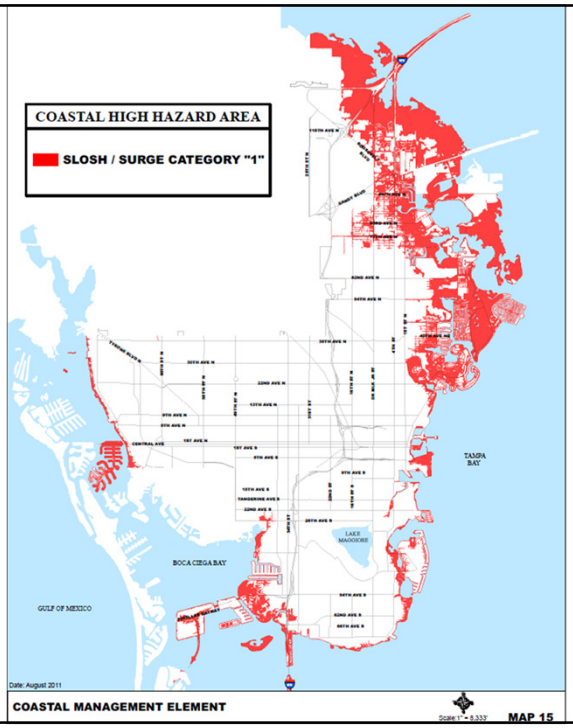
Previously known as the 100-year flood plain. Areas are identified on FEMA's Flood Insurance Rate Map. Designations include the V-Zone and A- or AE Zone

2

Coastal High Hazard Area

1. How long has the CHHA been around: 1985
2. CHHA boundaries determined by FDEM: SLOSH Model
3. 2010 - 2016 boundary expansion doubled: 41% of the City
4. Why did the CHHA double in size: Updated Technology accounted for Kelvin Wave Dynamics
5. What areas of the City are located in the expanded CHHA…

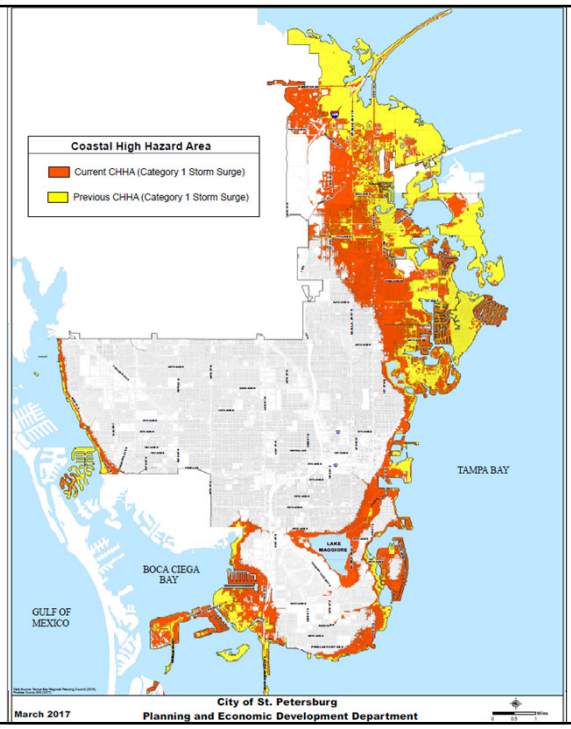
3



2010 CHHA Acreage

7,705 Acres

4

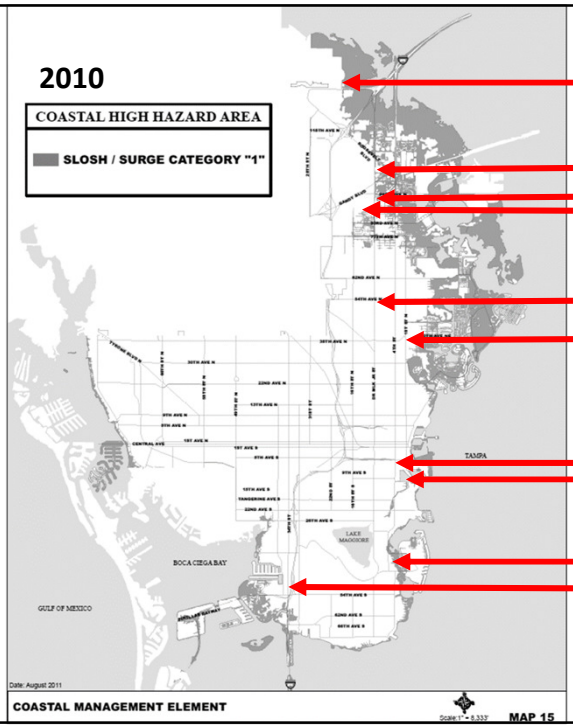


2016 CHHA Acreage

2010: 7,702
2016: 8,623

16,328 Acres

5



Gateway and Carillon Town Center

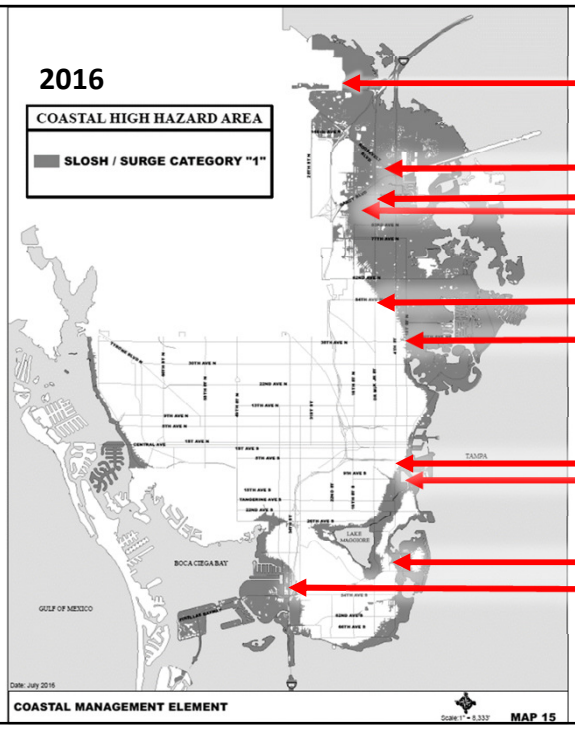
Jabil Headquarters Campus
Baypoint Commerce Center
ASI / Progressive Insurance HQ
Dr. ML King Jr. St. No. (62nd Ave. No.)
4th Street No. (54th Ave. No.)

Innovation District
USFSP Campus

Coquina Key Shopping Center
Skyway Marina District

10 Mobile Home Parks

6



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Innovation District
USFSP Campus

Coquina Key Shopping Center
Skyway Marina District

10 Mobile Home Parks

7

St. Petersburg Land Use Policy 7.1

Requests for residential density increases within the Coastal High Hazard Zone shall not be approved.

8

Prior CHHA Amendment History:

September 2015	Innovation District Visioning Plan
June 2016	2016 CHHA Map update issued by FDEM
March 2017	Innovation District Streetscape & Connectivity Plan
August 2017	Comp Plan public hearing: amend CHHA policy deferred
September 2017	Comp Plan public hearing: amend CHHA policy, canceled (Hurricane Irma)
July 2018	Comp Plan public hearing: amend CHHA policy APPROVED by LPA 4 to 3
August 2018	Comp Plan public hearing: amend CHHA policy, deferred by Council (Hurricane Michael)
January 2019	Council Committee of the Whole to discuss CHHA
February 2019	ULI Tampa grant process
March 2019	Innovation District (minus CHHA parcels) approved by Council

9

11

ULX: Technological Ingenuity features: "Saltmeadow" Multifamily Development

Proposal

1. Amend the Comprehensive Plan
   - Evacuation times / shelter capacity are mitigated
   - Construction is more resilient to storm surge; and/or
2. Amend the Land Development Regulations
   - Multi-family resiliency design standards in the CHHA

13

State Statute 163.3178(8)

A proposed comprehensive plan amendment shall be found in compliance with state coastal high-hazard provisions if:

a. The adopted level of service (16 hours) for out-of-county hurricane evacuation is maintained for a category 5 storm; or
b. A 12-hour evacuation time to shelter is maintained for a category 5 storm event and shelter space is available; or
c. Appropriate mitigation is provided that will satisfy subparagraph 1 or subparagraph 2. Appropriate mitigation shall include, without limitation, payment of money, contribution of land, and construction of hurricane shelters and transportation facilities.

14

Balancing Review Criteria – Countywide Rules

A. Access to Emergency Shelter Space & Evacuation Routes
B. Utilization of Existing and Planned Infrastructure
C. Utilization of Existing Disturbed Area
D. Maintenance of Scenic Qualities / Improve Public Access
E. Water Dependent Uses
F. Part of Community Redevelopment Area
G. Overall Reduction of Density or Intensity
H. Clustering of Uses
I. Integral Part of Comprehensive Planning Process
J. Location within an Activity Center or Target Employment Center
K. Implement Specific ISAP or Priority Sustainability Actions (to be listed specifically and related to innovation, natural system and realizing resilience)
L. Reduction of Storm Vulnerable Population / Structures

15

Land Development Regulations

A. Mitigation requirements

Construction of multi-family (resulting from a map amendment to increase density within CHHA) shall provide for mitigation: payment of money, contribution of land, construction of hurricane shelter(s).

B. Hurricane Evacuation Plan

Construction of new hotels and residential units (multi-family) shall require hurricane evacuation plan, incorporated into legal documents, such as lease.

C. Establish CHHA design standards, resiliency quotient

Comprehensive list of stricter building standards based on a model from Norfolk, Virginia.

16

Draft Design Standards Menu

TABLE XX: POINT SYSTEM FOR MULTI-FAMILY RESIDENTIAL DEVELOPMENT	
Development Activity	**Points Earned**
Component 1: Risk Reduction	
Construct building to meet design requirements of next higher classification of Risk Category, per ASCE 7.	X
Elevate finished floor above minimum 2 feet required (per ASCE 24 & Floodplain regulations)	X
Elevate mechanical systems above minimum 2 feet required (per ASCE 24 & Floodplain regulations)	
Construct an impact-resistant roof *(Are some materials better than others, metal?)*	X
Install impact resistant glazing *(or operable hurricane shutters, one or other is required, but is one preferable and should be incentivized?)*	X
Protect coastal property with a living shoreline (LSL). *(LSLs use natural materials to stabilize the shoreline and maintain valuable fish and wildlife habitat; LSLs utilize a variety of materials such as wetland plants, oyster shell, coir fiber logs, sand, wood, and native rock.)*	X
Design building located in the Coastal A Flood Zone to Flood Zone V *standards (is this the same as the first item?)*	X
Component 2: Recovery	
Establish operating procedures for how the project will handle loss of off-site or grid power, transition to a backup source of power, and transition back to normal operation	X
Generate no less than 75% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	X
Generate no less than 50% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	X
On-site battery storage of solar generated power with X amount of capacity	X
Install a cool roof on at least 25% *[sliding scale?]* of the total roof area of the development *[Add to definition section]*	X
Generate no less than 25% of the electricity expected to be used by the development from on-site solar and/or wind energy sources	X
Generate no less than 25% of the electricity needed expected to be used by the development from on-site solar and/or wind energy sources	X
Install a geothermal energy heating & cooling system serving all residential units and common areas	X
Equip the project with at least one alternative, independent source of electricity supply so that the project is capable of fully operating if a primary source of power experiences interruption	X
Pre-wire all units to accept power provided by on-site solar panels and/or wind turbines	X
Install a 20+ SEER HVAC system in each dwelling unit	X
Install a 16-19 SEER HVAC system in each dwelling unit	X
Install multi-room mini-split heating and cooling systems in each unit	X
Install a solar or tank-less water heating system in each unit	X
Install no fewer than 2 operable windows on no fewer than two exterior walls in each unit	X
Install a generator for power generation to keep critical functions (refrigerator, freezer, basic lighting, healthcare appliances, etc.) working in the event of power failure	X
Install highly-reflective blinds/shades or window film/tint to reduce solar gain	X

17

CHHA Design Standards Process

1. **County-wide Working Group established**
   County and City Emergency Management agencies, Forward Pinellas, County and other municipal Planning staff met several times working towards a mitigation solution.
2. **Public Stakeholder Meeting – May 21st**
   Well attended
3. **ULI Technical Advisory Panel – June 18-19th**
   Technical Memo issued
4. **City Council, Committee of the Whole Workshop – July 25th**

18

ULI Report: Stakeholder Feedback

- **Opportunities**
  - Higher CHHA standards sets example for the rest of the City
  - Opportunity for preparedness education and outreach
  - Risk reduction through replacement of older vulnerable structures with new
  - Existing institutions in CHHA need nearby housing
  - Increases likelihood that residents will have a home to return to post storm
  - Return on investment (ROI) for mitigation is strong
- **Constraints**
  - Draft code is not flexible enough or apply well to large-scale projects
  - Possibility of disinvestment in the CHHA because of increased development cost
  - Less development in the CHHA could slow City's economic development efforts
  - Increased density will place more people in harms way and burden shelters further
  - Missed opportunity to focus development in less vulnerable areas
  - Utilize coastal land for preservation/mitigation

19

ULI Report: 4 Pathways to Multi-family

1. **Menu Point System with Four Categories**
2. **LEED Gold Certification + Elevation + Recovery Requirements**
3. **Workforce Housing + Elevation + Recovery Requirements**
4. **Historic Structures + Evacuation Plan + Recovery Requirements**

20

ULI Report: Menu Categories

1. **Structural Mitigation**

   Address physical construction, engineering techniques that achieve hazard resistance

2. **Energy**

   Address the ability for buildings to be resource efficient, reduce waste and sustain electricity independently from grid

3. **Nature Based Mitigation**

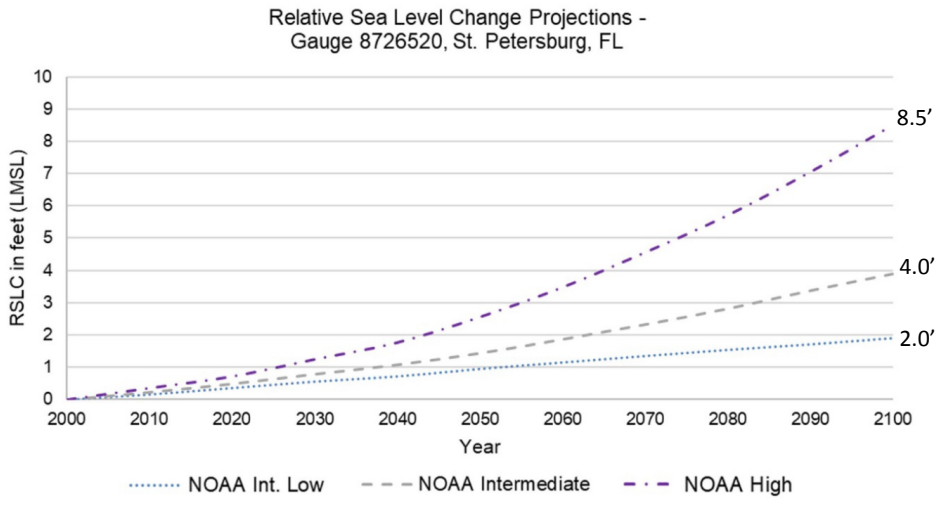
   Use natural systems to provide critical services, such as wetlands for flood mitigation or mangroves to reduce wave impacts and storm surge

4. **Recovery**

   ensuring that structures within the CHHA are intact and habitable after evacuations and quicker resumption of city services

21

ULI Report: Sea Level Rise



22

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24

Next Steps

1. **Draft code development with cost analysis**
2. **Stakeholder meetings**
3. **COW/Public Hearings**

COASTAL HIGH HAZARD AREA (CHHA)

Committee of the Whole

July 25, 2019

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